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4		UNE 27, 2011	
5	VS. 1	:00 P.M.	
6	APPLE, INC., ET AL B	EAUMONT, TEXAS	
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8	VOLUME 3 OF, PAGES 660 THROUGH 888		
9	REPORTER'S TRANSCRIPT OF JURY TRIAL		
10	BEFORE THE HONORABLE RON CLARK UNITED STATES DISTRICT JUDGE. AND A JURY		
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21		VIA COMPUTER-AIDED TRANSCRIPTION.
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   JURY TRIAL, VOLUME 3, 1:00 P.M., MONDAY, JUNE 27, 2011,
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   BEAUMONT, TEXAS, HON. RON CLARK PRESIDING.)
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              (OPEN COURT, ALL PARTIES PRESENT, JURY NOT
5
   PRESENT.)
6
              THE COURT: Let's go ahead, then, and -- I
   hope everybody had a good weekend.
8
              MR. HOLDREITH:
                              Judge, can I just mention
   there are a couple demonstratives in my set that
   Mr. Stephens advised me he still has an objection to?
10
11
   don't know if the court's rulings on Friday cover those
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            I won't get to those until later this afternoon;
13
   so, they will not come up in the first hour of testimony.
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              THE COURT:
                          Okay. You're talking about
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   Demonstratives 1059 and 1060?
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              MR. HOLDREITH:
                              Yes, sir.
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              THE COURT:
                          And I guess 1062?
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              MR. STEPHENS:
                             That's correct, your Honor.
19
   1059, 1060, 1062 --
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              THE COURT: And the concern with 1059 is?
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              MR. STEPHENS: They improperly characterize
22
   claim limitations by using an abbreviated word or two to
23
   represent an entire limitation. If they wanted to say,
   you know, "limitation 1B" or something like that, we
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   don't have a problem with the rest of it. It's just if
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you say, for example, infrared is a shorthand for the structure that corresponds to the means for language, that's going to be misleading.
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THE COURT: Might possibly make it easier for the jury to understand if you had the 1B. I'm going to overrule as far as the shorthand because this is a demonstrative. But Mr. Stephens is correct it might be a little easier if you put the claim number or sub-number next to the shorthand so people would know, yeah, that's the 1B thing. We've got a shorthand here for them.

MR. HOLDREITH: That's an excellent suggestion, your Honor. I'll try to write that in.

THE COURT: I will sustain in that it would be more clear than it was. Since it's a chart like this and a demonstrative, I'm not going to require them to try to put the entire claim term there.

Okay. What about -- is that the same for 1060 then?

MR. STEPHENS: Yeah. It was the same objection for all of those, your Honor.

THE COURT: All right. Well, the ruling will be the same on all of them.

MR. STEPHENS: There were a couple of other issues. I don't know if your Honor was --

THE COURT: Okay.

MR. STEPHENS: So, there are some exhibits that refer to *iTunes* and the *iTunes* Web site -THE COURT: Okay.

MR. STEPHENS: -- they attempt to use, and we think it's inappropriate for Dr. Almeroth to testify about *iTunes* and *iTunes* Web site while he's talking about infringement.

THE COURT: All right. And as stated on my ruling on the motion *in limine*, it will stand on that.

MR. STEPHENS: Okay.

THE COURT: Same basis.

Go ahead and bring in the jury.

(The jury enters the courtroom, 1:00 p.m.)

THE COURT: Good afternoon, ladies and gentlemen. Welcome back. Last night, about 7:00, we were over at a friend's house, my wife and I; and she suddenly collapsed, passed out. We thought at first it might be a heart attack or stroke. We took her down to the emergency room. They did a bunch of tests. They now think it was probably some kind of atypical migraine attack. She's had migraines in the past but never anything like this. All of the tests came back not being heart attack or stroke. I apologize for the delay. I was used to hurricanes causing delays, which is why we wanted your phone number. Hopefully you all got your

calls so you didn't have to come down here this morning.

Also, fortunately we had enough time built into the schedule that if we keep moving right along, I still think the evidence will be wrapped up -- it will be a little later in the day but on the same as we talked about before.

Let me mention two things. We're going into this infringement analysis. Remember that in the end you're going to be looking at the claims that you're given -- and I'll give those to you in the instructions -- and you will compare those against the accused products, in this case these various versions of the iPod.

Now, you're going to hear evidence about other things, for example, *iTunes* and some of the other things will be talked about because they're related to it; but those aren't related products. So, that's not part of the infringement.

And you're also going to see some charts showing some shorthand in the chart of what the claim is, for example, like claim 1B -- or 1B of a claim. Keep in mind that you won't be looking at the shorthand; you'll be looking at the claim language itself to see whether that's contained in the iPod you're looking at, for example.

But on the other hand, if you had to read out all of this language every single time someone mentioned it, this would go on forever.

The other thing is you've heard and you'll probably continue to hear that, for example, the people at Personal Audio had a lot of different patents. The people at Apple have a lot of different patents. Whether or not somebody has a patent in the past doesn't make this patent or these two patents or the claims in these two patents good or bad. Apple can have a patented product if other elements are patented and it can still infringe. Mr. Logan can have patents and they were good patents and you could find that these particular patents or a claim -- any one or all of the claims were invalid. So, don't get too carried away about the idea that people have patents in the past or people have patents now.

Now, there is going to be some argument about the fact that if something is patented it can't be what's called "equivalent." And they'll get into that later.

But don't focus in on, "Oh, gee, they're patented" or "He has patents" or count up "Well, this expert has 32 patents and that expert only has 28 patents." That's not how this goes. You're looking at the claim language.

You compare that with the accused products. And when they get to what's called "invalidity," when Apple is

saying the patent is not valid, you're going to be looking at the claim language and you're going to see if it was not new or if it was obvious or if it didn't meet a written description.

I'll give you some clear instructions on that. I'm just giving you a little warning about don't get caught up in what the lawyers and judges use as shorthand or an easy way, well, let's just count up how many patents there are on each side and they win. how it works.

Go ahead, counsel.

MR. HOLDREITH: Thank you, your Honor.

CONTINUED DIRECT EXAMINATION OF

KEVIN C. ALMEROTH

15 BY MR. HOLDREITH:

- Q. Dr. Almeroth, as we left off on Friday and as the judge was just instructing, your job is to analyze the iPods sitting in front of you like the claims that are on 19 this Demonstrative Exhibit 1011. And is that what you
- 20 did?

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- 21 Yes. sir. Α.
- 22 Now, Dr. Almeroth, when you looked to see if those
- 23 iPods had everything listed in this claim, for example,
- 24 did you notice that they have other things as well that
- 25 aren't on this list?

- A. Yes, sir, I did.
- Q. For example?

- 3 A. The iPods have some additional functions, a clock
- 4 and a calendar, notes that you can take and contacts you
- 5 can have. There are even some games on some of the
- 6 iPods. So, there are other things on the iPod that
- 7 aren't related to this claim.
- 8 Q. And how does it factor into your analysis of
- 9 infringement that iPods have some other things that are
- 10 not in this claim?
- 11| A. It doesn't factor into my analysis. My job was to
- 12 find these limitations in the iPod. If there was other
- 13 things, that doesn't make a difference with respect to
- 14 matching up these claims and these limitations with
- 15 what's in the device.
- 16 Q. So, Dr. Almeroth, if one iPod could store ten
- 17| songs or a hundred songs or a thousand songs, does that
- 18 make a difference to your infringement analysis?
- 19 A. No.
- 20 Q. Why is that?
- 21 A. Because a requirement to store a certain number of
- 22 songs is not listed up there on the board and is not part
- 23 of the judge's construction. That's not a test for
- 24 whether or not this device infringes or not.
- 25 What color the device is, what size it is,

- those are not things with respect to claim 1 that have to be evaluated and have to be present to infringe this
- 3 claim. It really is just those specific things on the
- 4 board.
- 5 Q. And does it have to be able to store some songs?
- 6 A. Yes. There will be limitations. We've talked 7 about that in the context of the patent. But there are
- 8 the things on the board -- it does have to store songs,
- 9 yes.
- 10 Q. So, is it the number of songs that's not required?
- 11 A. That's correct.
- 12 Q. Okay. And what if an iPod can download songs
- 13 really, really fast? How does that factor into your
- 14 analysis?
- 15 A. The fact that it's fast or really fast or
- 16 superfast or kind of slow, those aspects don't matter
- 17 when it comes to determining infringement. It just has
- 18 to be able to -- for some of the claims to be able to
- 19 download and transfer those songs onto the device.
- 20 Q. And how about -- there was some testimony about
- 21 this wheel or scroll -- Clickwheel on the iPods. How
- 22 does that factor into your analysis?
- 23 A. The same way. There has to be -- for example, on
- 24 the board with 1C, there has to be a means for accepting
- 25 control commands. The court has identified a couple of

- ways that you can do that, but whether it's a Clickwheel or some other kind of method doesn't matter.
- 3 Q. All right. There was some testimony during
- 4 Mr. Call's examination about bells and whistles. Were
- 5 you present for that?
- 6 A. Yes, sir.
- 7 Q. Does this have anything to do with bells and
- 8 whistles?
- 9 A. It's related to bells and whistles. The patent
- 10 describes a number of different inventions, and it
- 11 describes some extra features that can be considered as
- 12 part of other claims. But when it comes to this claim,
- 13 this claim will be the boundary for defining what
- 14 infringement is and it's really about this claim, these
- 15 limitations and then these devices.
- 17 how you did your analysis. And that includes what types
- 18 of information you had available to examine and some of
- 19 the things that you studied to try to figure out if the
- 20 iPods have the limitations in the claim. All right?
- 21 A. Yes.
- 22 Q. Let's start by asking: Did you prepare an index
- 23 showing some of the technical documents that you looked
- 24 at?
- 25 A. Yes, I did.

- 1 Q. And just very generally, where did you get these 2 technical documents?
- 3 A. These technical documents were produced by Apple.
- 4 As part of this case they have to prove documents that
- 5 are relevant; and, so, many of these documents on this
- 6 list came from Apple directly.
- 7 Q. All right. Dr. Almeroth, I'm now showing you
- 8 Plaintiff's Exhibit 748A. What is this?
- 9 A. This is a list of that summary of technical
- 10 documents.
- 11 Q. And who prepared this?
- 12 A. I did.
- 13 Q. This document has a title. It's a little hard to
- 14 read. Can you explain what the title is?
- 15 A. Yes. There are a number of pages to this
- 16 document, and on each page there is documents provided
- 17 for each of the 13 devices. There are some groupings as
- 18 we've discussed before. But all of the documents broken
- 19 down by the generations are on this and subsequent pages.
- 20| Q. So, page 1 is the classic Generation 1; and, for
- 21 example, page 2 is?
- 22 A. Classic Generation 2. The next one. classic
- 23 Generation 3, then 4, then 5, et cetera.
- 24 Q. Okay. And within Exhibit 748, do you have a list
- 25 of technical documents that describe each of the iPods

that you analyzed?

A. Yes, sir.

introduce them.

- Q. All right. Let's walk a little bit through what some of those documents are. We'll use the classic 3 as an example. And we'll get into some of these documents in detail as we go. Right now I'd just like you to
- 8 Let me ask you, first of all, about the
 9 physical devices. Did you also look at all the physical
 10 devices?
- 11 A. Yes, sir. Those are up here on the railing, and 12 then I can also demonstrate some of them later.
- Q. And I'm showing you now Exhibit 744. Is this an index you prepared of the iPods that you examined by number?
- 16 A. Yes, sir, it is.
- 17 Q. And there are some numbers along the column there,
- 18 like PX-50 and PX-186. Can you explain what that is?
- 19 A. Yes. Those are the exhibit numbers. And I think
- 20 there is a typo in there. The first column should be DX.
- 21 Those represent these 13 devices, and they all became a
- 22 defendant's exhibit. So, you have -- actually, no, I'm
- 23 sorry. Right. So, that's correct.
- So, for some of these I had access to multiple devices.

- 1 Q. Okay. So, for example, do you have one of the 2 devices that's on this list right there in front of you?
- 3 A. Yes. For example, the iPod classic third
- 4 generation, this is one (indicating); and on the back
- 5 it's PX-187.
- Q. And, so, does this list help you figure out whichof the iPods you looked at and what trial exhibit number
- 8 they are?
- 9 A. Yes, sir.
- 10 Q. All right. Let's look at the documents now. And
- 11 I'm showing you again Exhibit 748A, page 3 for the
- 12 classic 3. Does this use exhibit numbers the same way?
- 13 A. Yes, it does.
- 14 Q. Okay. And what is listed next to each of the
- 15 exhibit numbers? For example, PX-108 says it's the iPod
- 16 classic third generation user guide. What are you
- 17 indicating there?
- 18 A. That's the title of the document. So, the first
- 19 one on the list, the 108, is the user guide that comes
- 20 with this classic 3.
- 21 Q. And did you have user guides like this for all of
- 22 the devices that you looked at?
- 23 A. Yes, I did.
- 24 Q. So, for example, if we look at the previous page
- 25 of Exhibit 748, page 2, this is for which device?

- 1 A. This is for the classic Generation 2.
- 2 Q. And did you list a user guide for this one?
- 3 A. No. I didn't for this one because it's basically
- 4 the same as a classic Generation 1.
- 5 Q. And if we look at the classic Generation 1, the
- 6 first page of Exhibit 748, did you list a user guide
- 7 here?
- 8 A. Yes, I did.
- 9 Q. And is that the same user guide as for the
- 10 classic 3?
- 11 A. It's similar, but there are separate documents
- 12 because they apply to the different devices. So, I
- 13 listed both of them.
- 14 Q. Just to make that clear, the user guide for
- 15 classic 1 is what exhibit number?
- 16 A. 112.
- 17 Q. 112. And if we go to the classic 3, the user
- 18 quide is what exhibit number?
- 19 A. Exhibit 108.
- 21 Exhibit 108. I'm now showing you the first page of
- 22 Plaintiff's Exhibit 108. Can you explain what this is?
- 23 A. This is the user guide -- it's a little hard to
- 24 show up. Thank you for blowing it up.
- 25 It's the user's guide. It comes with a

- device. It comes with a little booklet, and it has a
- 2 bunch of pages that relate to teaching a user how to use
- 3 an iPod.
- 4 Q. Is this information that Apple provides to the
- 5 public somehow?
- 6 A. Yes, it does.
- 7 Q. How do they do that?
- 8 A. In the case of this user guide, it was packaged
- 9 with the iPod.
- 10 Q. What kind of information is contained in the user
- 11 guide?
- 12 A. It tells you, for example, getting started, what
- 13 you need to connect the communication port on this device
- 14 to receive songs and playlists. It tells you about the
- 15 buttons. It tells you about charging the device,
- 16| troubleshooting, all the things that a user has to know
- 17 to take advantage of the functions of this device.
- 18 Q. All right. Now turning back to Exhibit 748, the
- 19 index for the classic 3, the next line talks about an
- 20 iPod classic 3 online technical specification, which is
- 21 Exhibit 305.
- 22 A. Yes.
- 23 Q. I'm going to show you that. Can you explain what
- 24 kind of information is contained in a technical
- 25 specification?

- 1 A. This has specifications, details about some of the
- 2 components in the device, from the kinds of storage it
- 3 has to the kinds of power that it has; and it's about
- 4 three pages long and lists some of the details that --
- 5 the more technical aspects of the device.
- 6 Q. Now, this says $N_{3"}$ up here. What does that mean?
- $7\mid \mathsf{A}.$ That's the third generation of the iPod classic.
- 8 Q. Is this a public document that Apple provides to
- 9 the public?
- 10 A. No. This is available internal only to Apple.
- 11 Q. And is this a confidential document?
- 12 A. Yes, it is. It says so in the lower left corner,
- 13 "confidential."
- 14 Q. That's down here (indicating).
- 15 A. Yes.
- 16 Q. And we'll get into this in a little bit more
- 17| detail; but just as a quick tour, you mentioned this
- 18 describes storage?
- 19 A. That's right.
- 20 Q. Is that something that will be important to your
- 21 analysis?
- 22 A. Yes, it will.
- 23 Q. And what under the "storage" line are the kinds of
- 24 things we'll be looking at?
- 25 A. It talks about the kind of storage, the fact that

1 it has RAM.

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It talks about the type of persistent mass storage it has here. In this case it's a hard disk drive.

The first line is about the capacity. It talks about the size in gigabytes, which roughly translates to a number of songs that the device can store.

- Q. And is this indication of connectivity something 0 we'll be talking about?
- A. Yes. It also talks about the kind of communication port that's on the bottom of this device and the kind of protocol that you can use to communicate and receive information.
- 15 Q. Did you have technical specifications like this 16 for all 13 of the iPods that you examined?
- 17 A. Yes, I did.
- Q. Notice this document also has a reference to a headphone port. Is that something that's also going to be important to your analysis?
- A. Yes. A document like this and others on the list help build a picture for the kinds of things that I need to reach a conclusion about whether it infringes or not.
- Q. All right. Returning now to your index, just under the document we just looked at, the technical

- $oxed{1}$ specification that's Plaintiff's Exhibit 305, there is a
- 2 Plaintiff's Exhibit 304, a product specification?
- 3 A. Yes.
- 4 Q. Let's look at that. It looks very similar. What
- 5 is this?
- 6 A. It does. It's a product specification. This one
- 7 is a little bit longer. It's about four pages. But much
- 8 of the information is the same, again more specific
- 9 details -- clearly more specific details than what are in
- 10 a user guide about kinds of components and what their
- 11 capabilities are on the device.
- 12 Q. This indicates that there are some things in the
- 13 box. Is that something you considered?
- 14 A. Yes, it is.
- 15 Q. And what does that mean?
- 16 A. Some of those things that are in the box -- for
- 17| example, the earbuds, those are headphones. And it also
- 18 talks about the kind of cables that there are that will
- 19 attach to the bottom of this device. That's all
- 20 information that's relevant in my opinion.
- 21 Q. And did you find that all of the iPods come with
- 22 earbuds and with a cable for connecting?
- 23 A. Yes, sir.
- 24 Q. Let's go now back to your index. The next kind of
- 25 document on the list is a hardware specification, and

there are two lines for the hardware specification.

They're Plaintiff's Exhibit 329 and Plaintiff's

Exhibit 71. What kind of information is in those? I'll

4 pull up 329.

A. Those are documents that provide even more lower-layer detail about the device. They go into some of the specific components that are in the device.

This first one is about the Q14 Buster.

Q14 -- each of the devices has an internal code name for it. In the case of the classic 3, it's Q14. They usually use a letter and then a two-digit number. So, each of these 13 devices has one of these code names.

And then this describes then the hardware specification. If you advance forward a couple of pages, for example, there will be details on the types of components. Here is a table, for example, summarizing some of the hardware components that are in this device.

When you blow it up -- so, for example, the hard drive is from a company called "Toshiba." Now we're starting to look at additional details about the device. It talks about the battery, and that's from a company called "LG." Then there's also NEC. And then there's also -- for example, you get to the level of detail where you have this battery pack insulating tape, and I'm not even going to try and pronounce the company that that's

from.

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But this hardware guide will start to lay out some of the specific details of the things that are in this device.

THE COURT: Counsel, just to remind you, when you're going through the index, you're saying that it's plaintiff's exhibit. When you're talking about what's on the screen, you're just using a number. But just for record purposes, so far everything you've shown up on the screen so far this afternoon has been a plaintiff's exhibit?

MR. HOLDREITH: Yes, sir.

THE COURT: Okay. If you'll remember -- and I'll try to remind you -- when you're talking about the ones that are up, as you show the exhibit, plaintiff's or defendant's exhibits. We've got hundreds of each.

MR. HOLDREITH: I apologize for that; and just for the record, I'll read them right now. The ones we've discussed so far are PX-108, PX-305, PX-304, PX-329, and PX-325.

- 21 BY MR. HOLDREITH:
- 22 Q. All right. Dr. Almeroth, returning to your index,
- 23 underneath the hardware specification there is
- 24 Plaintiff's Exhibit 325, a bill of materials report.
- 25 What is a bill of materials report?

- The hardware specification guides were one level Α. of detail, and now we're going even further. This is about a 34-page document that lists, in very careful detail, all of the specific parts that are in there, down to some of the smallest components in the device.
- This kind of document is useful because it tells you manufacturer, part number, component information, size, shape, a lot of different details about everything that's in one of these devices.
- And did you have bills of materials reports for 10 11 all of the devices you examined?
- 12 Yes, sir, I did. Α.

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- Did you study them to find information in them to 13 Q. help inform you as to whether those devices have parts
- 15 that correspond to the claim?
- 16 Α. Absolutely.
- 17 All right. Dr. Almeroth, the next type of Q. 18 document in your guide is a chip schematic, Plaintiff's Exhibit 89. What is a chip schematic? 19
 - Α. I don't think we're going to go into lower than a chip schematic. That has all of the specific chips, how they are laid out on the boards, how those things are connected together. If you've ever seen a circuit board, it has the square and rectangular chips; and then you can sometimes see the wires that connect all those chips

together. This is a kind of hardware specification that does the exact same thing.

with this kind of detail, you can tell how each of the parts of the chip connects to other parts of other chips. There are references on these chips to their manufacturer number. You can cross-reference that with a bill of materials, build that back up into the hardware specification, and eventually back up into the user guide to see how these devices work top to bottom and outside to in.

- 11 Q. Dr. Almeroth, are you able to look at a diagram
 12 like this and to read and understand what it's saying?
- 13 A. Yes, sir.

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- 14 Q. Did you have chip schematics for all of the iPod 15 devices that you examined?
- 16 A. I did.
- 17 Q. I just want to return to the first page that's got 18 some text on it. What is this?
- A. This is a table of contents for the pages, the 13 pages that are in this chip schematic. And you can see
- 21 from some of the items on here it talks about the memory.
- 22 It talks about the hard disk drive. It talks about
- 23 FireWire and USB, the audio -- digital audio converter,
- 24 then the headphones, the dock connector which will be the
- 25 controller on the bottom there. There are pages -- I'm

- sorry, and I missed at the top the CPU. There are pages in this that talk about the chips and the connections that all of these devices have that are internal to the device.
- 5 Q. All right. And, Dr. Almeroth, is the -- what is 6 this component, "audio DAC"?
- A. That's the digital audio converter. What that tells you is -- or what it provides is the ability to take the songs that are stored on the disk digitally and then convert them into analog and be able to play them out, and that's why it's on the same page as the headphone amp. There has to be a small amplifier so that you can plug in an earbud or headphones and hear the
- 15 Q. Is that something we'll be coming back to?
- 16 A. Yes, sir.

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music come out.

- 17 Q. There is something here that says "CPU." Is that 18 related to the processor?
- A. That's right. The "CPU" stands for "central processing unit," and the P5002 is the model number of the CPU that's inside this classic 3.
- Q. All right. Dr. Almeroth, returning now to your index, Plaintiff's Exhibit 161 is something about *iTunes*, as is Exhibit 334. Why were you looking at *iTunes*
- 25 documents?

A. *iTunes* documents tells me about the kinds of things that can happen in *iTunes*. Now, as it relates to an iPod, you have to receive songs and playlists from somewhere. And what's important about this device is that it has the capability and that it's specifically programmed to get those things from outside into the device.

Now, it doesn't necessarily matter where they come from; but iTunes is evidence that this device has the capabilities that are listed on this panel.

- Q. Let's be clear. Is *iTunes* or the *iTunes* store something that you're accusing of infringement here?
- 13 A. No, sir, I'm not.

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- Q. Dr. Almeroth, the next thing on this list is
 something called "Defendant Apple's Sixth Amended
 Objections and Responses to Plaintiff Personal Audio,
- 17 LLC's, Interrogatory Number 11."

And there is another one that is an answer to
19 Interrogatory Number 10. What does that mean?

A. These are documents that contain answers to questions. Personal Audio, as part of this case, was able to ask Apple questions in writing; and Apple provided responses to those. Those are called "interrogatories." And these plaintiff's exhibits are references to those interrogatories, and those contain

- 1 particular questions and answers that were relevant to my 2 analysis.
- 3 Q. And did you review those interrogatories,
- 4 Numbers 11 and 10, and the responses; and did they
- 5 provide information that informed your opinion?
- 6 A. Yes, they did.
- 7 Q. Okay. Let's just look quickly at Plaintiff's
- 8 Exhibit 625. Is this one of those two documents?
- 9 A. Yes, it is.
- 10 Q. And turning to page 14 of Plaintiff's Exhibit 625,
- 11| could you just explain -- did you get the information for
- 12 all of the devices that you examined?
- 13 A. Yes. Generally the answers provided by Apple were
- 14 broken down into different devices, into these different
- 15 generations and families.
- 16 Q. If we look at that answer for a minute -- is it on
- 17 the next page?
- 18 A. Yes, sir.
- 19 Q. What is the question that was being answered in
- 20 this interrogatory?
- 21 A. It talks about -- this is a document relating to
- 22 the source code, to the software algorithm. And this
- 23 says, "For versions of the iPod application on the iPod
- 24 classic Generation 3, source code implementing the
- 25 corresponding software or algorithm that allows a user to

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navigate forward in a playlist of songs is described as follows."

So, that was in response to a question that was asked by Personal Audio. That's the first paragraph, and the rest of this page has information about the algorithm that Apple uses. And I used this page for this device and this page -- or similar pages for the other devices as part of forming my opinion with regard to infringement.

- 10 Q. Does this answer describe how source code works in the iPod? Is that what it is?
- A. That's correct, how the source code works; and it
 points to particular source code functions and particular
 files and how the source code works.
- 15 Q. Now, Dr. Almeroth, in addition to answering the
 16 question about an algorithm that allows a user to
 17 navigate forward, does this interrogatory provide
 18 information about another algorithm?
- A. Yes, it does. It also talks about the "back"
 command, to skip backwards. And that's -- it's very
 similar language until you get to the end of the second
 line, "allows a user to navigate backward in a playlist
 of songs."
- Q. All right. Dr. Almeroth, notwithstanding that you had these answers from Apple, did you also look in the

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source code for yourself to understand what the
algorithms are that the iPod uses?
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Α. Yes, I did. There is a source code computer that has all of the source code related to these devices. Ι looked at all of that source code as well.

What these documents do is provide information and backups to that information and source code and documents that allow me in multiple different places to find each of the elements on this chart.

MR. HOLDREITH: Now, your Honor, we're about to introduce an exhibit which reproduces a portion of Apple's source code, as does this answer. I understand that the exhibits will be sealed but Apple has not asked for the courtroom to be cleared and the parties will work out sealing the exhibits after court.

> THE COURT: Is that correct?

MR. STEPHENS: That's correct.

THE COURT: All right. These exhibits, as we've discussed before, will, in fact, be sealed.

> MR. HOLDREITH: Thank you, your Honor.

BY MR. HOLDREITH: 21

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Dr. Almeroth, can you just explain -- when you 23 looked at source code, what did you have to do to be able to look at it? Just physically where did you go, and how did you get access to it?

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- A. The source code that was provided by Apple is quite secret; and in order to look at the source code for these devices, I had to go to Houston, to the offices of Fish & Richardson. And in a room they had a box that contained all of this source code, and it was in that room that I had to look at the source code. I couldn't bring in any electronic devices or anything. I just had to use the one computer that was in that room.
- Q. Is that -- in your experience as a computer of scientist, is that a normal kind of practice?
- A. It's a normal practice to protect source code, but the degree to which the source code in this case was protected was much stronger than what I've seen in other cases.
- 15 Q. And why is it that companies take these steps to 16 protect their source code?
- A. If this source code got out, then somebody would be able to take that source code, see exactly how these devices work, and quickly and easily reproduce an almost identical copy.
- 21 Q. And is that something they can't do just by buying 22 an iPod and looking at it?
- A. That's correct. When you buy the iPod, it has the source code on the device but it's as software and it's not readable. So, even if you were able to pull that

software out, a person couldn't just look at that software and understand what was happening.

This is the raw version of that source code that can be read by somebody who is trained to look at source code.

- Q. And just to be clear, isn't there some way, as a computer scientist, that you can just extract that source code from an iPod?
- A. Not the source code. There is a process that the source code goes through where it's turned from -- I'll say "human readable format," but it's really a person trained in computer science -- from that format and text into a representation of 1s and 0s that the processor understands but that a computer scientist couldn't understand. You go through that process to make it easier for the device to understand what the source code does, but that's not available to somebody who owns an iPod or is smart enough to pull that software off.

THE COURT: Excuse me, counsel.

Ladies and gentlemen, we happen to have a number of these kind of cases here in the Eastern District. We're not trying to hide anything from anybody, but this source code is confidential. So, I order it to be protected. These measures are taken so that the companies can be here, they can present it, but

at the same time their secrets aren't given out. There
is nothing wrong with that. And, so, we make every
effort, and you'll hear my instructions about you can
look at this stuff in the jury room but you can't take it
with you, don't be making copies of it. Because, I mean,
the companies are entitled -- and that's part of the

whole idea of intellectual property. They're entitled to

- 9 BY MR. HOLDREITH:
- 10 Q. Dr. Almeroth, were you able to print some portions
 11 of Apple's source code for purposes of your study?
- 12 A. Yes, I did. There were limits on how much I could 13 print. But as part of my analysis, when I identified
- 14 relevant source code, for at least some of the devices, I
- 15 printed a binder that contained that information. Just
- 16 the smallest number of pages I could print that I could
- 17 use as part of my infringement analysis.

protect things like source code.

- 18 Q. And turning back to your index of things you
- 19 considered, Plaintiff's Exhibit 748A, is there a
- 20 reference to the source code that you were able to print
- 21 out on this list?
- 22 A. Yes. That's the second from the bottom. It's
- 23 Plaintiff's Exhibit 713. It's the classic 3 source code
- 24 excerpts.
- 25 Q. Will we be getting into that in some detail later?

A. Yes, sir.

- Q. Let me just ask you to just give us an introduction to what source code looks like. This is 4 Plaintiff's Exhibit 713. Is this something you printed out?
 - A. Yes, it is. It's the first -- there are about 300 pages of printed source code. That was the minimum set I could use to -- as part of my analysis. Maybe -- if you want to blow up a little bit so that I can just briefly explain it.

What you see here on the left side is a series of line numbers, and then it's human readable. You can see what's actually here. But the source code instructions are -- unless you're familiar with the syntax and how source code is written, it probably won't make that much sense.

But you can see some of the names of the things in here, for example, around line 2714, a TrackField, PlayDate. You can imagine that that relates to a field about a track on a date that it was played. So, a person reading this code can see some of the information just by looking at the words.

And then I understand, for example, what "case" means and what "break" means. Those are programming language conventions that tell me what the

source code is doing.

- Q. You referred to a Line Number 2714. Can you just explain what you're doing when you reference a line number?
- A. Certainly. There are a large number of files that contain source code that's all combined together. It's broken into different files just to keep functions separate. And a function is a set of lines of code. So, generally the way that -- in my analysis that I reference the source code, it will be a particular file name; and then in that file name a function name, and then there will be line numbers that cover all of the code related
- Q. So, when you say a line number for some code we're looking at, can we just look over here to the right to understand what you're referring to?
- 17 A. Yes, sir.

to that function.

- 18 Q. Okay. Now, Dr. Almeroth --
- 19 A. I'm sorry. At the top of the page, if you show
- 20 the top, at the very top, it will have the file name.
- 21 So, in this case this is the "DulcimerDatabase.c" source
- 22 code file for classic 3; and these are some of the lines
- 23 from that file.
- Q. Now, is there one file or is there more than one file of source code that makes an iPod go?

- 1 A. There are many files, many, many, many files.
- 2 Q. Approximately how many files did you look at in
- 3 this case?
- 4 A. For these 13 devices, there are about 23,000
- 5 files.
- 6 Q. And how many lines of code, more or less?
- 7 A. More or less, it was between 15 and 16 million
- 8 lines of code.
- 9 Q. And how long did it take you to analyze all of
- 10 that?
- 11 A. A very long time. On the clock, probably about
- 12 170 to 200 hours.
- 13 Q. That was just for looking at the source code?
- 14 A. Yes. And a good deal of that time was spent in
- 15 Houston in this office with the source code computer.
- 16 \mid Q. \mid Now, in addition to the documents that you just
- 17 identified with reference to the index, 748, did you also
- 18 look at other documents in the case?
- 19 A. Yes, I did.
- 20 Q. And did you also have access to any testimony of
- 21 Apple employees?
- 22 A. Yes, I did.
- 23 Q. Please explain that.
- 24 A. Certainly. We talked about the interrogatories.
- 25 In addition to interrogatories, there were Apple

engineers who were deposed. And a deposition is where lawyers from both sides can ask in this case the Apple engineers questions. It's under oath; so, it's just like it was in the courtroom. It's videotaped, and the transcript is taken just like at the trial here. And I was either present at the depositions to see what the Apple engineers said in response to questions about all manner of things, from source code to the devices; and I also had the written transcription that I could use later

11 Q. How long does a deposition take like that? Is

to analyze and include in part of my analysis.

12 that a few hours?

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- 13 A. No. It's all day. Generally you go about seven
- 14 hours on the record. In some of these cases the
- 15 depositions spilled over into a second day.
- 16 Q. Now, Dr. Almeroth, did you produce a report of
- 17 your conclusions and the basis for the conclusions in
- 18 this case?
- 19 A. Yes, I did.
- 20 Q. And about how long was that report?
- 21 A. That report was about 25,000 pages.
- 22 Q. Dr. Almeroth, I want to turn to what it costs to
- 23 do this kind of an analysis. Now, how many total
- 24| hours -- you told us there were one or 200 hours to
- 25 analyze source code, but how many total hours did you

- spend producing this report?
- 2 A. Since about September, 2009, when I started on
- 3 this case, I've spent about 900 hours total.
- $4 \mid Q$. 900 hours is a long time.
- 5 A. That's a lot of weekends and holidays, sir.
- 6 Q. Did you look for ways to do this as efficiently as
- 7 you could?
- 8 A. I did. Certainly the groupings can help; but to
- 9 the extent that I had all of these documents to go
- 10 \mid through, I did it as quickly and as efficiently as I
- 11 could.
- 12 Q. Did you have to make more than one trip to Houston
- 13 to go look at source code?
- 14 A. Yes, sir, I did, several trips.
- 15 Q. Dr. Almeroth, do you charge for your time to do
- 16 this kind of work?
- 17 A. I do.
- 18 Q. And is there a going rate for PhDs in computer
- 19 science to do this kind of work?
- 20 A. There is.
- 21 Q. And do you know whether the expert that Apple
- 22 hired, Dr. Wicker -- did he also charge for his work?
- 23 A. He did.
- 24 Q. And do you know what his rate is?
- 25 A. I do. It's published in our reports. As part of

- 1 this document, we have to explain that we charge a 2 certain rate.
- 3 Q. And what are your rates in this case?
- 4 A. My rate in this case is \$500 an hour.
- $5 \mid Q$. And what is his?
- 6 A. It's \$550 an hour.
- $7\mid \mathsf{Q}.$ All right. Dr. Almeroth, I want to now go through
- 8 an example of one device, one claim in some detail so
- 9 that we can see how you find that each element -- or how
- 10 you determine that each element is present in an iPod.
- 11 | 0kay?
- 12 A. Yes. sir.
- 13 Q. And can we use this claim board to help us with
- 14 that?
- 15 A. Yes.
- 16 \mid Q. Just remind us of what the process is.
- 17| A. The process is I've taken this one claim, divided
- 18 it up into the limitations that are required by that
- 19 claim so that it's easier to go through and talk about
- 20 each one individually. There will be a corresponding set
- 21 of documents. I'll try and show some of those documents
- 22 that were the basis for my conclusion to go through,
- 23 identify the parts. And as we go through each of these
- 24 limitations, I'm going to ask that those boxes be checked
- 25 off so that we can explain that I found that limitation,

that I reached the conclusion that that limitation was present based on the documents. And then when we get done, I expect all of those limitations will be checked off.

And it's upon that basis that all of the limitations have been checked off, that I've found evidence for each one of these limitations, that I would opine that claim 1 is infringed by this particular device.

- 10 Q. Dr. Almeroth, as a reminder, are we going to be 11 using this claim limitation numbering, 1, 1A, 1B?
- 12 A. Yes, we will.
- 13 Q. And is that the same numbering that's found in the
- 14 juror notebooks in the Patent Claims Asserted by
- 15 Plaintiff document?
- 16 A. Yes. That's correct.
- 17 Q. Okay. Dr. Almeroth, let's start with the first
- 18 part of this claim. Can you explain what the very first
- 19 part is?

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- 20 A. Certainly. It says, "a player for reproducing
- 21 selected audio program segments comprising." It's fairly
- 22 short; and what it says is you have a player that can
- 23 play programs, or songs.
- 24 Q. What does that word "comprising" mean?
- 25 A. "Comprising" in claim terminology means

- 1 "including." And what that means is that this player has
- 2 to at least have the things that are listed here. It
- 3 could have other things, but those things are -- if
- 4 they're unrelated to these limitations don't matter for
- 5 infringement.
- 6 Q. So, is "comprising" sort of like "including"?
- 7 A. Yes.
- 8 Q. Now, Dr. Almeroth, this might seem simple for the
- 9 audio player part. But just to demonstrate your method,
- 10 when you examined the iPod classic 3, did you conclude
- 11 that it is an audio player for playing program segments?
- 12 A. Yes, I did.
- 13 Q. How did you do that?
- 14 A. Through a couple of ways. The first was to pick
- 15 up the device and look at it, to use it, to get it to
- 16 play songs. It's a player. It will play songs.
- 17 Based on that, I could pretty much check off
- 18 the box for Number 1. But I also wanted to find that it
- 19 was a player as described, for example, in the user guide
- 20 or in other Apple documents that described the iPod
- 21 classic 3 as a player.
- 22 Q. And again this might seem simple; but for
- 23 demonstration purposes, did you find information in
- 24 Apple's documents that confirmed your analysis that it's
- 25 an audio player?

- A. Yes, I did.
- 2 Q. I'm showing you now Plaintiff's Exhibit 745. It's
- 3 entitled "Dulcimer, Apple's opportunity in the MP3 player
- 4 market." Is this one of the documents that you looked
- 5 at?
- 6 A. Yes, it is.
- 7 Q. What is this document?
- 8 A. This document is a presentation given by Tony
- 9 Fadell and by Stan Ng. The date on the document is
- 10 April 3rd, 2001. And I understand that this document was
- 11 a presentation given to Steve Jobs.
- 12 The importance about the date is this was a
- 13 document that was proposing the iPod, basically the
- 14 genesis document that said to Apple, to the CEO, "Let's
- 15 do a player." That's this document.
- 16 Q. And was there an iPod that existed? I mean, did
- 17 Apple have an iPod product that existed at this time?
- 18 A. No. This was the first document -- the first
- 19 presentation to Steve Jobs proposing that the iPod be
- 20 developed.
- 21 Q. All right. I'd like to turn, then, to page 9 of
- 22 Plaintiff's Exhibit 745. Is this one of the documents
- 23 that was relevant to confirm your analysis that iPods
- 24 are, in fact, a player?
- 25 A. Yes, it is.

Q. And how does it do that?

- 2 A. The title -- and in a fairly large font -- says
- 3 "Audio Player." And it's an audio player -- if you look
- 4 then in the right column, about the second bullet down,
- 5 "Audio Player with playlist editing and effects." That's
- 6 an important piece of evidence for my opinion.
- 7 Q. Now, just while we're on this document -- we'll
- 8 come back to this later. But can you explain this other
- 9 bullet point on the left side that says "Processor" and
- 10 then it has "Cirrus Logic" and "Portal Player"?
- 11 A. Yes. The processor is the CPU. And in this
- 12 initial presentation, Mr. Fadell was proposing that they
- 13 use a Cirrus Logic 7409 chip plus some other hardware
- 14 pieces, or a Portal Player 5002 chip. Part of this
- 15 proposal was to say, "We've done some thinking about
- 16 this. Here are the kinds of things that we might put
- 17 into this audio player."
- 18 Q. And just briefly, what is a Cirrus Logic 7409
- 19 processor chip?
- 20 A. Cirrus Logic is a company that makes chips. Their
- 21 7409 was a particular type of processor.
- 22 Same thing with Portal Player. That was a
- 23 different company, different number. Mr. Fadell was
- 24 considering -- or at least on this -- this slide shows
- 25 that there were two options in the running at this point.

- 1 Q. And are those CPU chips that you can go out and
- 2 buy on the open market?
- 3 A. Yes.
- 4 Q. As of 2001?
- 5 A. That's correct.
- 6 Q. All right. Dr. Almeroth, did you find any other
- 7 documents that confirmed your analysis that the iPod is
- 8 an audio player for playing programs?
- 9 A. Yes, I did.
- 10 Q. And I'm showing you now Plaintiff's Exhibit 108,
- 11 the user's guide. Is this one of the documents you
- 12 considered?
- 13 A. Yes, it is.
- 14 Q. And how was this useful to your analysis?
- 15 A. This document, like the other one -- but this one
- 16 for the user that comes with the device says that it's a
- 17 player, that it plays songs.
- 18 Q. I'm showing you now page 6 of Plaintiff's
- 19 Exhibit 108. Is this one of the pages you're speaking
- 20 of?
- 21 A. Yes. it is.
- 22 Q. And what on this page are you referring to?
- 23 A. "iPod is a music player and much more." You
- 24 can -- there are a couple of other bullet points. You
- 25 can listen to audio books. You can store thousands of

- Those are the features of an audio player that songs. can play programs.
- 3 Q. All right. Dr. Almeroth, this claim limitation, Number 1, says "selected audio player segments." Do you understand that means they must be chosen by or for a
- The word "selected" is a term that the court Α. has construed. And what that means is the court was asked to go through and for some of the words in this 10 claim provide a definition. And that definition helped

describe the bounds of what the claim covers.

- And what we do is we call that a "claim construction," a claim term that the court has construed; and there is a definition that, in doing my analysis, I 14 had to consider as part of this.
- 16 Q. Did you conclude that the iPod is a player that 17 allows a user to play program segments selected by or for the user? 18
- 19 Α. Yes. That's correct.

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user?

- 20 Could you explain that? Q.
- 21 Certainly. The fact that on this device you could 22 have playlists and songs -- and this is an example where iTunes is useful because it shows evidence that the 23 things that you can play on this, the playlists and 24 25 songs, can come from somewhere else and that inside of

- 1 that thing, that's somewhere else you can create
- 2 playlists, you can create songs. You can populate the
- 3 playlist with whatever songs you want and then you can go
- 4 through the process of putting those playlists and songs
- 5 on this device. Therefore, it's a player and it
- 6 reproduces those songs and those songs were selected on
- 7 the behalf of the user.
- 8 Q. Dr. Almeroth, have you now pointed out everything
- 9 required to find that the first element, the audio
- 10 player, is present in the iPod?
- 11 A. Yes.
- 12 Q. So, we could check that off?
- 13 A. Yes, please.
- 14 Q. All right. That seemed pretty straightforward.
- 15 Are they all going to be that straightforward?
- 16 A. I hope so.
- 17| Q. We're going to have to take a little more time on
- 18 some of them.
- 19 A. There will be a little bit more detail.
- 20 Absolutely.
- 21 Q. Okay. Let's look at the second element now, which
- 22 is 1A, the "means for storing a plurality of program
- 23 segments." What is this from the user's point of view?
- 24 A. This is the storage capacity on this device to
- 25 hold the -- in this case to hold the program segments, to

hold the programs, to hold the songs.

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In the first day, on Friday, I talked about how one of the benefits of this device was to be able to take the songs and playlists and take them with you.

That's a feature that's described in the patent. In order to do that, this device needs some kind of storage; and that's what's required by limitation 1A.

- Q. Now, this has some unusual words. It says "means for." Does that mean anything special for your analysis?
- 10 A. It does. When patents use "means for," it's a

 11 special kind of language called "means-plus-function."
- And I was here for the first couple of days of the trial, and this means-plus-function language was described in
- 14 some detail as it relates to the patent.

Because this is in means-plus-function language and because the court has offered a definition of this, I used that definition in the analysis for means-plus-function limitations here to reach my conclusions.

- Q. Dr. Almeroth, I'm showing you a statute from the United States Code. This is Demonstrative Exhibit 1003.
- 22 Is this a statute that you followed when you did your
- 23 analysis of means-plus-function?
- 24 A. Yes, it is.
- 25 Q. And it says that you can -- it says something

about equivalents here.

- A. Yes.
- Q. Can you just explain how that affected your
- 4 analysis?

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A. Certainly.

In the means-plus-function you have two parts.

There is this function here (indicating), and then there is also a structure that corresponds to that function.

9 And what you have to do is --

MR. STEPHENS: Objection, your Honor. This is opinion testimony about the law. This is not within his competence or in his report.

THE COURT: Well, I'll let him cover the basics as how this is to apply to his analysis.

Ladies and gentlemen, I'll instruct you on the means-plus-function; and, in fact, in your jury book you've already been given my definitions of what "functions" are and what "structure" has been identified. But I think it is appropriate for the expert to go

over -- or the witness to go over the framework in which he conducted his analysis. But in the end, you're going

22 to follow my instructions on this.

Go ahead.

24 MR. STEPHENS: Thank you.

25 A. So, there is a function; and then there is a

corresponding structure. And what this also allows for is this idea of equivalents. We saw some of that in the context of the patent when it talked about, for example, all of the different ways that you could communicate with this device. There were some that were satellite or a modem or an infrared link or you could use a telephone line. It could be wireless; it could be wired.

Anything that's equivalent to one of the structures that's identified in the patent would be sufficient to meet the limitation that's here.

11 BY MR. HOLDREITH:

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- 12 Q. Dr. Almeroth, when you did your analysis, did you
- 13 have some definitions from the court of what the
- 14 functions and what the corresponding structure is?
- 15 A. Yes, I did.
- 16 Q. And did you do the steps of first finding the
- 17 function and then finding whether there was the
- 18 corresponding structure or the equivalent in the iPod?
- 19 A. Yes. That's correct.
- 20 Q. All right. Now, for this --
- 21 THE COURT: Excuse me, counsel.
- 22 MR. HOLDREITH: Yes. sir.
- THE COURT: Just to be sure, ladies and
 gentlemen -- you'll be instructed on this later -- these
 guivalent structures had to exist at that time. This is

- going to get confusing. But when you're talking about a structure that is equivalent, it can't be some new,
- 3 later-invented structure. It has to be a structure that
- 4 was available at the time the patent was issued. And,
- 5 so, you'll get some more instruction on that later; and
- 6 I'm sure the witnesses will keep this all very clear, as
- 7 clear as they can in their testimony. But this is one of
- 8 the very reasons I've told you early on do not make up
- 9 your mind until you hear my final instructions so you
- 10 know what the questions are and what the law is that you
- 11 have to base your answers on.
- 12 Go ahead.
- 13 BY MR. HOLDREITH:
- 14 Q. Dr. Almeroth, did you, when you considered
- 15 equivalents for the '076 patent, consider whether the
- 16 structure was equivalent as of the issue date of the
- 17 patent, 2001?
- 18 A. That's correct.
- 19 Q. To be clear, did you use the date right underneath
- 20 the patent number here, which is the issue date, March 6,
- 21 2001?
- 22 A. Yes. sir. That's correct.
- 23 Q. And is that different from the filing date when
- 24 the inventors filed their application?
- 25 A. That's correct. The inventors filed in 1996; and

- $oxed{1}$ then when the patent comes out five years later, what $oxed{I}$
- 2 consider is what a person of ordinary skill in the art,
- 3 this person looking at the patent, would understand to
- 4 have been equivalent in 2001.
- So, when it comes to, for example, "means for
- 6 storing a plurality of program segments," any of the
- 7 structures that are defined there, if this device has the
- 8 equivalent of that structure as of 2001, then this
- 9 limitation is still infringed.
- 10 Q. All right. Let's apply that, Dr. Almeroth. Did
- 11 you have a definition of the limitation 1A, means for
- 12 storing?
- 13 A. Yes, I did.
- 14 MR. HOLDREITH: Your Honor, may I put up a
- 15 board in the well?
- 16 THE COURT: I'm sorry?
- 17 MR. HOLDREITH: May I come forward to --
- 18 THE COURT: Yes, you may.
- 19 MR. HOLDREITH: Thank you.
- 20 BY MR. HOLDREITH:
- 21 Q. Dr. Almeroth, this is Demonstrative Exhibit 1033.
- 22 Is that the definition?
- 23 A. Yes, it is.
- 24 Q. Dr. Almeroth, could you explain, please, how the
- 25 definition on Demonstrative 1033 relates to the claim

and, in particular, claim element 15?

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A. Certainly. The limitation for 1A is in the left side of the board of Plaintiff's Demonstrative 1033.

That's the function and the part of the language that comes from 1A.

And then on the right side there is a function attributed to that language, and here the function is "storing a plurality of program segments." You'll see that the function in the right column, the right column, the function --

JUROR: Other right.

MR. HOLDREITH: I'm sorry. I'm facing the wrong way, folks. Excuse me.

A. That function mimics some of the language that's in the left. In this case it's fairly straightforward to understand that the function is storing a plurality of program segments.

And then there is a corresponding piece that talks then about the structure. The structure corresponding to the storing function can be the following structures and equivalents thereof.

And there are two that are identified here.

Only one has to be present in the device, and it's either one or two or the equivalent of one or two.

*

BY MR. HOLDREITH:

- Q. All right. Dr. Almeroth, did you find that in the iPod, when you examined the classic 3, for the function
- 4 of "storing a plurality of program segments," it does the
- 5 identical function?
- 6 A. Yes, it does.
- Q. And did you find structure which is either identical or equivalent to the data storage system consisting of a high-speed RAM and a persistent mass
- 10 storage device?
- 11 A. Yes, I did.
- 12 Q. Please explain.
- A. Certainly. Using the documents, I identified that the function was present and that one of 1 and 2 was
- 15 present. In this case it was Number 1.
- I went through the documents to determine that
- 17 there was both high-speed RAM and that there was a
- 18 persistent mass storage device inside of this iPod
- 19 classic 3.
- 20 Q. And how did you find -- or how did you determine
- 21 that the iPod classic 3 has a high-speed RAM and a
- 22 persistent mass storage?
- 23 A. In this case I looked at the online technical
- 24 specification which we reviewed. I also looked at some
- 25 other documents, a bill of materials and the chip

schematics as well.

- 2 Q. Okay. I'm going to show you Plaintiff's
- 3 Exhibit 304, which is one of the specifications for the
- 4 iPod classic 3. Did this document provide any
- 5 information about the RAM and the persistent mass
- 6 storage?
- 7 A. Yes, it did.
- $\mathsf{8}^{\mid}\,\mathsf{Q}$. How did it do that?
- 9 A. The last table at the bottom talks about storage
- 10 and memory and it identifies a capacity of 10 gigabytes
- 11 and that's for the hard disk drive. That's the
- 12 persistent mass storage that's inside of this device.
- 13 So, that capacity is for storing the audio segments.
- 14 It also identifies RAM, which here is 32
- 15 megabytes. And then also related to the capacity of
- 16 10 gigabytes, it talks about a hard drive type, a hard
- 17 drive speed, and then an access speed, some of the
- 18 additional details about the persistent mass storage
- 19 that's used inside of this device.
- 20 Q. And how do you know that this storage is for
- 21 songs -- or for program segments? Excuse me.
- 22 A. In part of this exhibit it identifies 2500 songs.
- 23 That shows that the hard disk drive is used to store the
- 24 songs.
- 25 Q. Did you look at any other documents to determine

- that the iPod classic 3 has RAM and a hard drive?
- 2 A. Yes, I did. For example, the bill of materials I
- 3 also looked at as well.
- 4 Q. Okay. I'm now showing you Plaintiff's
- 5 Exhibit 325. Is this the bill of materials for the
- 6 classic 3?
- 7 A. Yes, it is.
- 8 Q. And what in here gave you information?
- 9 A. There is a page in this document that lists the
- 10 RAM, the random access memory, the high-speed RAM that's
- 11 used inside of a classic 3.
- 12 Q. I'm showing you page 19 of Plaintiff's
- 13 Exhibit 325, and I'm sure it's very difficult to read.
- 14 So, I'm going to blow it up.
- 15 Is this the page that you were referring to?
- 16 A. Yes, it is.
- 17 Q. And how does this tell you about RAM or persistent
- 18 storage?
- 19 A. It's a little hard to read, but you can see here
- 20 (indicating) it talks about Samsung semiconductor. They
- 21 are a company that makes RAM.
- 22 And then you can look over here in this column
- 23 (indicating). It talks about SDRAM. There are some
- 24 additional details about that RAM that are provided.
- So, that tells me, based on the bill of

Let me first hear from Apple. What are your thoughts on that?

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MR. STEPHENS: Well, your Honor, I think I want to take a look at the case to be sure; but it seems like it might be slightly overly broad because the difference, as you know, has to be insubstantial, your Honor, and a substitute that costs a whole lot more money is not insubstantially different, for example.

THE COURT: Well, now, are you talking about the doctrine of equivalents or available structures -- the equivalent structures?

MR. STEPHENS: In terms of whether it is an equivalent structure, I don't think it matters. The real difference is whether the function is met between those two, as you know.

THE COURT: Well, see, already we're confused.

We have and we will be giving to the jury a -and there will be a lot of discussion among the experts
on equivalent structures. But there is also this
doctrine of equivalents. They aren't even spelled
differently. It isn't equivalence with a C on one and
equivalents with a T. No, no. We had to give the jury
this exact same word twice and I'm trying to think of a
way to explain it and reading this case -- and I really
was hoping we wouldn't get into this before we had this
discussion -- is figure out a way to focus them on the
then-available substitutes for structural equivalents so

that they're not picking out something that somebody came up with years and years later for structure. And then the doctrine of equivalents, of course, has its own limitation -- "limitations" is a bad word, isn't it -- has its own requirements.

And that's what I'm trying to -- I'm bringing that up so that if your experts -- I'm trying to come up with some language and tell you in advance so maybe the experts use the same language. If we can't agree, then I'll just have to make up my decision; but I'm just letting both sides know -- and there are other opinions that came out around the same time and earlier that talk about that. But you might take a look at that because --

MR. STEPHENS: Absolutely, your Honor.

THE COURT: It does seem to be -- it would be helpful if we could come up with a way of getting on the same sheet of music in terms of letting the jury know what the difference is, especially given some of the defenses that, based on the papers, I think you're going to try to come up with. It's going to start getting real confusing.

I think I heard in your opening you were talking about this Clickwheel that you patented later on and invented later on. Well, is it really fair that that's kind of an equivalent when it's really not a

structural equivalent if it wasn't then available? But if you insist on always using the equivalent term, it's a little bit hard for you to explain later on that, gee, these poor dumb jurors didn't understand, when we can't come up with a way to explain it to them.

MR. STEPHENS: I certainly agree some sort of instruction is appropriate, your Honor.

THE COURT: Okay. Then let's take a look at that one because I may actually tell them that earlier so they can understand and it would also make it easier for the experts if they can both be talking about, "Well, that wasn't available then" -- that would be your point if that's what your point is. And their point would be, "Oh, yes, it was available then because." And at least they would be fighting on the same thing rather than blindfolded and trying to guess what was coming up later. So, I need counsel to look at that over the break. My guess is is it would be helpful to come to a resolution on that or at least an idea on that pretty quick.

I came up with -- there are some other words that could be used. I mean, "available substitute" seems to be one that is used by the judges in that case action; and it seems to be one of the clearer -- that case is one of the clearer discussions of that dichotomy, which causes a lot of problems to very learned judges and

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   lawyers, from what I can see.
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                           We're going to be in recess then
              All right.
3
   until quarter past.
4
               (Recess, 2:06 p.m. to 2:16 p.m.)
5
               (Open court, all parties present, jury
6
   present.)
7
              THE COURT:
                           Go ahead, counsel.
8
              MR. HOLDREITH:
                               Thank you, your Honor.
9
   BY MR. HOLDREITH:
          Dr. Almeroth, have you now explained where you
10
11
   found in the bill of materials for the classic 3 that
12
   there is a RAM?
13
   Α.
         Yes, sir.
14
   Q.
          Is that a high-speed RAM?
15
          Yes, it is.
   Α.
          Did you also find evidence that there is
16
   Q.
   persistent storage?
17
          Yes, I did.
18
   Α.
19
   Q.
          Where did you find that?
          That was also in the bill of materials on a later
20
   Α.
21
   page.
22
          Again, I know this page is very small type; so,
   Q.
   I'm going to blow it up. Well, you can't see that, can
24
   you?
         Let's try again.
25
              Did I get the right part there?
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- A. Yes, you did.
- 2 Q. Okay. Now, how is this relevant to your opinion?
- 3 A. This is relevant to my opinion because it
- 4 describes as part of the bill of materials that this is a
- 5 Toshiba and then it talks about that it's a hard drive
- 6 here (indicating). Some of those numbers are hard to
- 7 see. But I've looked at -- more closely at a version of
- 8 this, and it's "HDD" for hard disk drive. It mentions
- 9 some of the other characteristics that were in the online
- 10 technical specification, and it mentions "Q14" here as
- 11 well.

- 12 Q. And if you look just over to the next column over,
- 13 on page 25 of Plaintiff's Exhibit 325, is that a little
- 14 more readable over there?
- 15 A. Yes. These are additional details about this
- 16 particular device. It mentions "Toshiba" again. In this
- 17 case the 1.8-inch is the size of the hard drive; so,
- 18 that's maybe the size to your first knuckle. And it's a
- 19 hard disk drive. And it also includes a size there for
- 20 15 gigabytes.
- 21 Q. All right. Dr. Almeroth, after considering the
- 22 iPod itself and the documents that you looked at,
- 23 including the ones you've explained, did you conclude
- 24 that everything required by claim element 1A of the
- 25 '076 patent is found in the iPod classic 3?

- A. Yes, it is.
- 2 Q. Should I check that off?
- 3 A. Yes, please.
- 4 Q. All right. Dr. Almeroth, let's go to claim
- 5 limitation 1B of the '076 patent. That recites something
- 6 about a "means for receiving and storing a file of data
- 7 establishing a sequence. What is that from the user's
- 8 point of view?
- 9 A. That is the means for receiving and storing the
- 10 playlists that come across. And it's in that playlist as
- 11 part of the sequence that it describes; it's the order in
- 12 which they're scheduled to be reproduced.
- This is specifically the means for receiving
- 14 and storing; so, there are two different functions there,
- 15 first of all receiving the playlist and then also storing
- 16 the playlist.
- 17 Q. Is there a definition of this term that identifies
- 18 the function and the structure?
- 19 A. Yes, there is.
- 20 Q. Dr. Almeroth, I'm now showing Demonstrative
- 21 Number 1027. Is that the definition that's relevant to
- 22 limitation 1B?
- 23 A. Yes, it is.
- 24 Q. Could you please explain a little bit more about
- 25 what the function and the structure are here?

A. Certainly. There's two functions and two separate structures, and they are broken apart. The top function is -- the function is "receiving and storing," and then there are two separate structures. There is a structure defined for receiving; and then towards the bottom, after the numbered list 1 through 6, there is a structure for storing as well. So, I have to identify that the structure is there and that one from the list of six and one from the list of two are present in the device.

- Q. Before we get to the structure, let's just focus on the function. Did you find for the iPod classic 3 that it performs the identical function of receiving and storing a file of data establishing a sequence?
- 14 A. Yes, I did.

- Q. Now, let me pause for a moment. Why is it important to the user to have a separate file of data establishing a sequence of playback?
 - A. The importance here is if you've got a library of lots of songs and they're all stored on the hard drive, the more songs that you have, you need some ability to try and organize those. And if the songs all sort of exist as separate files, you'd like some way to organize them, to be able to build a playlist. And you'd like to be able to build a playlist without changing the songs themselves. You can create Playlist Number 1, and it has

- 1 a set of songs on it. A Playlist Number 2, you know, may
- 2 be for party music or working-out music or drinking wine
- 3 and listening to jazz music. You could have separate
- 4 playlists, and those index all of the different songs.
- 5 And by creating separate playlists, you can not have to
- 6 change the audio content.
- Q. What do you mean by "not have to change the audio
- 8 content"?
- 9 A. The songs stay the same, and the playlist is
- 10 really just an index into all of those different songs
- 11 that will pull out a set in an ordered sequence.
- 12 Q. Does that mean you can change what you listen to
- 13 and in what order you listen to without re-recording the
- 14 songs onto your player?
- 15 A. That's correct, either by creating a new list or
- 16 changing the playlist that you have.
- 17 Q. Now, is the iPod programmed specifically to
- 18 receive and store a file of data establishing a sequence?
- 19 A. Yes, it is.
- 20 Q. And how did you determine that?
- 21 A. Well, I determined that again by using the device
- 22 and looking at what it did but then also diving deeper
- 23 into the user guide and the bill of materials, looking at
- 24 the same kind of structures for what's defined here and
- 25 required on the page and what exists in the iPod.

- Q. Did you find source code in the iPod that told you that it's specifically programmed to receive and store playlists?
- 4 A. Yes, that's correct. The source code told me the structure of the data, of the playlists as they were stored on the disk. And then that would be separate from the songs themselves; so, that's an important requirement.
- 9 Q. Now, let me pause to ask you an important point.

 10 Does the iPod have to actually have a playlist stored on

 11 it to be infringing this claim?
- 12 A. No.

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- 13 Q. Why is that?
- What's important in this claim is to be 14 15 specifically programmed to have the capability to store 16 these playlists. It doesn't have to actually have 17 playlists on the device to infringe; but it has to perform these functions, to be capable of performing 18 these functions based on the software that's in there and 19 20 also using the hardware components that were built into Those have to be for storing the songs in 21 the device. 22 the playlists that can be transferred onto the device. 23 So, are you looking to see whether the iPod is Q.

able to store playlists rather than looking to see if

there is actually a playlist on there?

- A. That's correct.
- 2 Q. All right. Now, Dr. Almeroth, did you, in fact,
- 3 find a means for receiving that is identical or
- 4 equivalent to one of the structures listed for the means
- 5 for receiving?
- 6 A. Yes, I did.
- 7 Q. Can you explain that, please?
- 8 A. Certainly. The structures that are identified
- $\mathsf{9}|$ here are the six that are on the list. And the exercise
- 10 that I had to go through was to find one of the six or
- 11 its equivalent.
- 12 Q. Did you focus on one of those six in particular?
- 13 A. Yes, I did. Number 4, the "radio or infrared link
- 14 for connecting to a local communications server computer
- 15 linked to the Internet."
- 16 Q. Can you explain what that means?
- 17 A. What that means is what we're looking for is the
- 18 structure on this device -- this claim is about this
- 19 player, and it's the structure that's on this device that
- 20 can be used for receiving. And then the characteristic
- 21 that's required by the structure or an equivalent to this
- 22 structure is a "radio or infrared link for connecting to
- 23 a local communications server computer linked to the
- 24 Internet." The key here is this has to be the thing on
- 25 the device for the receiving. That's the thing that's

- 1 required. But it has to be capable of being able to
- 2 receive from a local communications server computer
- 3 that's connected to the Internet.
- 4 Q. Now, focusing on the iPod, can you explain what
- 5 the structure is that's for connecting?
- 6 A. Certainly. That's the local communication --
- 7 sorry -- that's the customized communication port that's
- 8 on the bottom of the device.
- 9 Q. And if someone is looking on the bottom of an
- 10 iPod, can you just describe in a little more detail?
- 11 Physically what are you looking at there?
- 12 A. Right. It's a 30-pin connector and you can plug
- 13 in a cable to it and it will be, for example, running the
- 14 USB protocol or FireWire.
- 15 Q. What's the USB protocol?
- 16 A. Those are two examples of protocols that you can
- 17 run over this physical connection, that you can then use
- 18 to exchange data.
- 19 Q. And you mentioned "FireWire." What's that?
- 20 A. FireWire is another example. It's a type of cable
- 21 and connection that was used in the classic 1 and 2, for
- 22 example.
- 23 Q. And did the classic 3 use USB?
- 24 A. Yes. It's capable of supporting USB, and it does
- 25 use USB.

- 1 Q. So, did the iPod start using FireWire?
- 2 A. It did. The original design was to use the
- 3 FireWire protocol.
- 4 Q. And then -- we've heard a lot about FireWire in
- 5 Apple's patents, that they say they have them FireWired.
- 6 What happened with FireWire?
- 7 A. Well, they stopped using FireWire for data
- 8 transfer; and they switched over to using the USB
- 9 protocol for data transfer.
- 10 Q. Do later iPods use FireWire for data transfer?
- 11 A. They do not.
- 12 Q. Now, which models of the iPod can use FireWire for
- 13 data transfer?
- 14 A. The classic 1 and the classic 2 certainly. I
- 15 believe also the classic 3. And I think that that's it,
- 16 just those three for data transfer.
- 17 Q. After that?
- 18 A. They switched to USB.
- 19 Q. Okay. Now, let me just quickly show you a
- 20 timeline. It's Demonstrative Exhibit 1004.
- 21 Can you explain what this chart is and just
- 22 explain what you just told us with reference to the
- 23 chart?
- 24 A. Certainly. The date is at the top and at the
- 25 bottom here. There's three important dates related to

the patents here. You have the patent application date in October, '96. And then you have the '076 patent issue date in 2001, and then the '178 patent is issued in 2009.

The rest of this chart, the middle, is divided up into three regions for each family. The G.1 through 6 relate to the iPod classic, and that's starting out in almost white and going to darker green.

And then you have the mini for Versions 1 and 2 and then the nano for Generations 1 through 5.

And what you see here are when these devices first became available. And then when the next device became available, Apple will stop selling from the generation previous.

So, in the case of Generation 1 and 2, a generation came out first. That was in 2001.

16 Generation 2 briefly came out at the same time, but they

17 both stopped being for sale in 2003 when Generation 3

18 came out. And then before Generation 3 was taken off the

19 market to be replaced by 4, the classic 1 *[sic]* came out.

20 And you can see just based on the time how these

21 different devices line up.

Q. So, the FireWire for data transfer, which ones is that?

A. That's back here (indicating), in 2001, 2002, and

25 part of 2003.

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- 1 Q. And the remainder?
- 2 A. That's all using the USB protocol.
- 3 Q. And not a FireWire for data transfer anymore?
- 4 A. That's correct.
- 5 Q. Dr. Almeroth, did you find anything in Apple's
- 6 documents about whether the port or the connector on the
- 7 iPod is for connecting to a local communications server?
- 8 A. Yes, I did.
- 9 Q. What did you find?
- 10 A. For example, in the user guide there is a picture
- 11 and some text describing how this port is then connected
- 12 to something else.
- 13 Q. I'm showing you Plaintiff's Exhibit 108, the
- 14| cover. And now if we go to page 12 of Plaintiff's
- 15 Exhibit 108, is this the figure you were describing?
- 16 A. Yes, sir.
- 17| Q. And can you explain your opinion with reference to
- 18 this figure?
- 19 A. Certainly. This talks about the iPod having the
- 20 capability to connect to and transfer music. And it does
- 21 that through -- here it talks about FireWire capable, or
- 22 it can use USB as well.
- 23 And then the sentence at the bottom of the
- 24 page says, "When you connect iPod to your computer" --
- 25 MR. STEPHENS: Objection, your Honor. I think

he's about to talk about a nonaccused product.

THE COURT: Overruled.

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A. It says, "When you connect iPod to your computer, iTunes opens automatically and transfers the songs and playlists in your music library to iPod."

Now, again, the importance here is this means for receiving at the bottom, the communication port that's shown on this figure that's connected then to that wire. And it has to have the capability to connect to a local communications server computer that's then connected to the Internet.

As evidence that this communications port has that capability is this figure. And this figure shows that when you connect it to *iTunes*, that's evidence that *iTunes* will then transfer over, for example with this limitation, playlists. And this is evidence then that this device and its communication port has the capability to receive the playlists.

- 19 Q. Okay. And you're relating that to, on the
 20 Demonstrative Exhibit 1027, Structure Number 4 for
 21 receiving; is that right?
- A. Yes, sir. And I mentioned the words "the local communications server computer linked to the Internet."

 That's part of Number 4. And it's all with respect to

25 the function then at the top, "receiving and storing a

file of data establishing a sequence."

- Q. Now, can you just explain what an infrared port is, Dr. Almeroth?
- 4 A. An infrared port -- it's a port similar to this,
- 5 and it's used for transferring data as well. There are a
- 6 lot of similarities between the infrared port and the
- 7 port that the Apple iPod uses.
- 8 Q. All right. Dr. Almeroth, is an infrared link
- 9 something that uses a wire like is shown in this figure
- 10 from the iPod user guide?
- 11 A. No. An infrared link is wireless. And then the
- 12 iPod uses a wired link.
- 13 Q. Now, why is it that you say a wired link is an
- 14 equivalent to a wireless link?
- 15 A. The important question here is whether it's
- 16| equivalent. And the way of determining equivalents is
- 17 whether there are insubstantial differences with respect
- 18 to using the wireless versus the wired link as it relates
- 19 to receiving the data establishing a -- sorry -- the file
- 20 of data establishing a sequence.
- 21 It doesn't matter to that function whether the
- 22 data comes across as wireless or whether or not it comes
- 23 across as wired. It's an insubstantial difference with
- 24 respect to performing that exact function.
- 25 Q. So, I want to ask you now, Dr. Almeroth, from the

- 1 perspective of someone skilled in the art, in 2001, are
- 2 USB and FireWire and an infrared link equivalent links
- 3 for connecting to a local computer and receiving a
- 4 sequencing file?
- 5 A. Yes. I was a person of skill in the art. I
- 6 thought about what I knew at that time, and it's my
- 7 opinion that they were equivalent.
- 8 Q. Now, did you do anything to determine whether
- 9 other people in 2001 had the same view?
- 10 A. Yes, I did. I wanted just more than my opinion.
- 11 I wanted some evidence that I could point to that other
- 12 people, people of ordinary skill in the art at the time
- 13 in 2001, would think that these two things were
- 14 equivalent, that there would be insubstantial
- 15 differences.
- 16 Q. And did you find anything?
- 17 A. Yes, sir, I did.
- 18 Q. What did you find?
- 19 A. I found a number of documents that describe both
- 20 USB and infrared links being used interchangeably for the
- 21 transfer of a file of data establishing a sequence.
- 22 Q. Can you give us an example?
- 23 A. Sure. In one example I looked at documents that
- 24 Apple had. I figured the Apple engineers would be people
- 25 of ordinary skill in the art and documents that they had

- 1 available to them would be good evidence that they and
- other people who wrote those documents thought that there
- 3 would be an equivalent between infrared and USB.
- 4 Q. And what did you find?
- 5 A. I found that there was support for that kind of
- 6 opinion.
- 7 Q. I'd like to show you now Plaintiff's Exhibit 759.
- 8 Is this one of the documents you found?
- 9 A. Yes, it is.
- 10 Q. Is this an Apple company document that was printed
- 11 by Apple?
- 12 A. No. This is from the company Cirrus Logic. It's
- 13 at the top. But this was a document that was available
- 14 to Apple. In fact, I received this document from Apple
- 15 as part of the documents that it produced.
- 16 What's also important about this document is
- 17| the Cirrus Logic chip was one of the things that
- 18 Mr. Fadell considered that could go into the original
- 19 iPod.
- 20 Q. Let's just go back to that Plaintiff's
- 21 Exhibit 745. Is this the document where you were
- 22 explaining earlier that Mr. Fadell was considering the
- 23 Cirrus chip?
- 24 A. Yes, it is.
- 25 Q. And if we look at page 9, is this the page you're

referring to?

- 2 A. Yes, it is.
- 3 Q. Can you point that out for us?
- 4 A. That's under the "Processor," the Cirrus Logic
- 5 7409 (indicating).
- 6 Q. Returning now to Plaintiff's Exhibit 759, the
- 7 Cirrus Logic chip. We see this one is 7209 rather than
- 8 7409. What's the explanation for that?
- 9 A. It's a slightly different chip, a different model
- 10 number. But this was a document that Cirrus Logic had
- 11 given to Apple and that Apple had produced as something
- 12 that they knew about. So, the chips between the 7209 and
- 13 the 7409 were very similar.
- 14 That doesn't matter because the point is
- 15 really to demonstrate that Apple engineers plus the
- 16| people at Cirrus Logic thought that the use of an
- 17 infrared link was substantially the same as the use of a
- 18 wired USB connection.
- 19 Q. Dr. Almeroth, can you just orient us here a little
- 20| bit? The title here says this is an "Ultra-Low-Power
- 21 Audio Decoder System-on-Chip." What is the thing that
- 22 this document is talking about?
- 23 A. This is talking about a CPU, the brains of a
- 24 device -- for example, like the iPod, that could play
- 25 songs, organize -- sorry -- mainly play songs and

implement the functions of playing songs.

- Q. And is this a processor you could buy off the shelf in 2001?
- A. That's right. This is a document from Cirrus

 Logic that they wrote describing, in a significant amount

 of detail -- I think this is about a 150-page document -
 that describes in detail all of the components and what

 this Cirrus Logic chip does. So, they were trying to

sell this chip that people could use in portable players.

- 10 Q. And turning now to page 3 of Plaintiff's
- 11 Exhibit 759, does this tell you what this Cirrus Logic
- 12 processor was designed for?
- 13 A. Yes, it does. If you can blow that up, it says,
- 14 (reading) as shown in the system block diagram, simply
- 15 adding flash memory, an LCD -- which is a kind of
- 16 display -- an audio digital audio converter, and some
- 17 discrete components, a complete low power digital audio
- 18 player system can be made.
- And it refers to an illustration on the next
- 20 page.

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- 21 Q. What does that mean?
- 22 A. It means that with this chip you could get some
- 23 additional components -- like flash memory, a display,
- 24 and a digital converter -- and you could build an audio
- 25

player.

- 1 Q. And are the components listed here under "System"
- 2 Design" in Exhibit 759 components that were readily
- 3 available in 2001?
- 4 A. Yes, they were. I don't think we had talked about
- 5 the date of this document, but this chip and the
- 6 components that it's talking about was even available
- 7 earlier. The date on this document on the front page is
- 8 December, 1999.
- 9 Q. Now, we're talking about 2001, around the time the
- 10 patent issued right now, right?
- 11 A. Yes.
- 12 Q. Was this kind of chip available in 1996 when the
- 13 patent was filed?
- 14 A. No, it was not.
- 15 Q. Okay. And we're talking about 2001 because this
- 16 is an assessment of equivalents around the time the
- 17 patent issued?
- 18 A. Yes, that's correct. It's all about the question
- 19 of evaluating whether Number 4 that's been identified by
- 20 the court is equivalent to what the iPod has.
- 21 Q. Dr. Almeroth, I'd like to ask you now: What is it
- 22 here that is relevant to whether an infrared link and a
- 23 USB link are equivalent for receiving data?
- 24 A. Certainly. It's with respect to the function.
- 25 And the function here is "receiving and storing a file of

data establishing a sequence." It's for transferring data. That is the key.

And if you look at this document, in the first column at the bottom, it says "Data Download." And there what this chip is talking about is the ability to do data download. So, if you continue on and read through that column -- in fact, the most relevant paragraphs of that column are the last two before the "Digital Audio Interface."

- 10 Q. These two (indicating)?
- 11 A. Yes, sir.

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- 12 Q. And what these say is?
- A. (Reading) this chip can be connected through an industry standard USB slave device through an external interface.
- The next sentence, that it has power. It has a data bus.
 - And then it says that (reading) the EP7209, through its USB interface, can support a rapid transfer of compressed audio data over a USB interface.
- 21 Okay. That's Point Number 1.
- Point Number 2 is the next paragraph.
- 23 (Reading) The EP7209 also includes a built-in 115.2
- 24 kilobyte-per-second IrDA SIR protocol encoder/decoder --
- 25 Q. Let me stop you right there. What is that?

- 1 A. IrDA is the infrared data association. They2 developed the standard for sending data over an infrared3 link. Okay?
 - The SIR is the serial interface.
 - And the protocol encoder/decoder is the ability to change the bits and the light signals and then to receive bits that are light signals and then divert them back into the sequencing file. Okay?
- 9 Q. Is this an IR link?

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- 10 A. Yes. Sorry. It's an IR link.
- These two paragraphs show that on this chip,
- 12 this Cirrus Logic 7209, it had both a USB and an infrared
- 13 link for exchanging data. That is very good evidence
- 14 that these two are considered to be equivalent, that they
- 15 could be used to do the same thing.
- 16 Q. And how do you know the IR link on this Cirrus
- 17 Logic chip could be used for downloading data?
- 18 A. The part you haven't highlighted yet, "to drive an
- 19 infrared communication interface to download the data."
- 20 Q. Dr. Almeroth, did you find any other documents
- 21 from Apple's files that are relevant to whether an IR
- 22 link is equivalent to an USB link?
- 23 A. Yes, I did.
- 24 Q. I'm showing you now Plaintiff's Exhibit 760. Is
- 25 that one of those documents?

A. Yes, it is.

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Q. And what is this?

Portal Player chip.

- A. This is a presentation that's given by Portal
 Player. So, that's another manufacturer of chips. This
 is -- the date on this is 2001. This was a presentation
 given to Mr. Fadell describing the capabilities of the
- Again, the idea is in the other -- maybe you good also show Exhibit 745 on page 9 again.
- 10 Q. Okay. I'm now showing you the cover of 11 Plaintiff's Exhibit 745.
- A. This was the presentation that Mr. Fadell had given to Mr. Jobs. And on page 9 these are the two processors -- the first one was the Cirrus Logic, and then the next one was Portal Player. Mr. Fadell had considered the two of those as alternatives and possibilities to put into the original iPod.
 - of that is using the information that's contained in this Portal Player presentation that we'll go through and describe the capabilities of this chip as an alternative.

So, if you could go back to Exhibit 760.

- 22 Q. I'm now showing you page 7 of Plaintiff's
- 23 Exhibit 760. Is this part of this presentation to
- 24 Mr. Fadell by Portal Player?
- 25 A. Yes, it is.

Q. What do you see here?

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A. The title is "Networked Audio Vision." There is a personal computer here (indicating). There is a home entertainment system, wireless speakers, a faceplate from

There's a PalmPilot here (indicating).

There's a whole variety of devices. And what this is
about is synchronizing content on PCs, cell phones, and
PDAs at home and at work.

And it describes two kinds of networks. There is a network here (indicating) where the solid line is a hardwired connection. It's an actual wire.

And then the dashed lines are for wireless.

So, there's wireless over here (indicating) that can go to the home audio, to the car faceplate or the speakers; and there's also wireless over here (indicating) that can be used to sync or transfer a stream of data.

And what this figure is describing is in some instances you can use a hardwired connection or you can use a wireless connection to synchronize content.

- 20 Q. Does synchronizing content include -- in an audio 21 environment, does that include moving songs around?
- 22 A. Moving songs and moving playlists, yes.
- Q. And does this figure show using a USB connection to move that data?
- 25 A. Yes, it does. One of the wired connections here

is USB.

- Q. And what does this figure show that's relevant to whether an IR connection is equivalent to a USB 4 connection?
- 5 A. In the PalmPilot that existed in 2001, the ability 6 to transfer data was done using infrared.
- 7 Q. And what do you conclude from this drawing, then?
- 8 A. This is another piece of evidence that
- 9 demonstrates that people of skill in the art, including
- 10 the engineers at Apple, understood that using USB to
- 11 transfer data and songs was equivalent to using IrDA to
- 12 transfer songs. The only real difference between these
- 13 with respect to the wireless versus the wired was an
- 14 insubstantial difference as it relates to the function of
- 15 receiving and storing a file of data establishing a
- 16 sequence.
- 17 Q. All right. Dr. Almeroth, now I want to ask you
- 18 one more thing about this structure. It says something
- 19 about a local communications server connected to the
- 20 Internet. What's the significance of that to your
- 21 conclusion?
- 22 A. Right. The structure here -- and the structure
- 23 we're talking about is this communications port on the
- 24 device -- has to have the capability to communicate to a
- 25 local communications server that's connected to the

Internet.

Again, the focus here is on what this device -- what this -- the capability this communications port has. So, one of the things that I can look at for support is back in the user guide where it describes how one of the things that you connect to this is an *iTunes* computer and then that *iTunes* --

MR. STEPHENS: Objection, your Honor. This is not an accused product.

THE COURT: Has anyone said this was an accused product?

MR. STEPHENS: No. They've admitted it's not.

THE COURT: Okay. And, so, your objection is?

MR. STEPHENS: My objection is he's using a product that's not accused to demonstrate infringement to satisfy an element of the claim, and that is this port for connecting to a communications server for connection to the Internet.

THE COURT: Okay. Again, counsel, I don't think anyone has accused the *iTunes* or the computer; and on the other hand, the accused devices do have to be able to accept communications from them. If you're complaining that he's showing where it's coming from, I don't see where that's an objection; so, overruled.

*

BY MR. HOLDREITH:

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- Q. Please continue, Dr. Almeroth.
- A. Certainly. And I want to make it clear that we're talking about the player and this communications port.

But as evidence that this communications port

has that capability, you can look at this figure and see

that it's capable of connecting to an *iTunes* computer and

then that *iTunes* computer can then be connected to the

Internet.

The *iTunes* computer and its connection to the

Internet and the fact that you can do that is evidence

that this device has that capability.

- Q. And can the port in the iPod be used, in fact, for connecting to a local communications server connected to the Internet?
- 16 A. Yes, it can.
- 17 Q. And is the iPod programmed specifically to be able 18 to connect to a computer that's acting as a local
- 19 communications server?
- A. Yes. The software in this device when it's connected to an *iTunes* computer is specifically programmed to connect to the *iTunes* computer which then might be connected to the Internet.
- THE COURT: Okay. Just for record purposes,

 you keep talking about an *iTunes* computer. Do you mean a

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746
   computer with iTunes loaded on it?
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              THE WITNESS:
                             Yes, sir.
3
              THE COURT: So, it could be a Toshiba computer
4
   or --
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              THE WITNESS:
                            It could be a laptop or a
6
             This figure shows a laptop; but yes, any
   desktop.
   computer --
8
                         Or perhaps any Apple computer?
              THE COURT:
9
              THE WITNESS: Yes.
10
              THE COURT: All right.
11
   BY MR. HOLDREITH:
                      Dr. Almeroth, have you now explained
12
   Q.
         All right.
  how it is that the iPod classic 3 that you examined meets
13
   limitation 1B of claim 1 of the '076 patent?
14
15
         Yes, I have.
   Α.
16
         And upon examining the iPod and the documents you
   Q.
   examined and the source code and the testimony of
17
18
  witnesses, did you conclude that everything required for
19
  the receiving structure in claim 1 is found in the iPod
   classic 3?
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21
         Yes. I did.
   Α.
22
         Now, have we done the storing structure yet?
   Q.
23
         We haven't done the storing structure as it
   relates to the playlist, the data establishing a
24
25
   sequence.
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- And did you find that there is storing 1 Q. Okav. structure as it relates to the playlist in the iPod classic 3?
- Yes, I did. 4 Α.

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- And how does that relate to this definition? 5 **Q**.
 - That relates to this definition because you need the ability to store the playlists as well and you have to have -- with respect to performing the function using one of the two structures that are on the page. the bottom you have 1 and 2; and the one that's in black, the data storage system consisting of both high-speed RAM and the persistent mass storage device, those were the
- 13 things that I found in the iPod for storing a file of 14 data establishing a sequence.
- 15 Q. Now, you explained the structure for storing the songs before, right? That was the RAM and the hard 16
- drive?
- Yes. 18 Α.
- 19 Q. How does that relate to this structure?
- It's the same structure. But in addition to 20 Α.
- 21 storing the program segments, it's able to separately
- 22 store the playlists as well.
- 23 And is there anything we need to go over about the Q.
- RAM or the hard drive again, or is that the same
- 25 structure as we just went through?

- $\mathsf{I} \mid \mathsf{A}.$ It's the same structures. The two pages in the
- 2 bill of materials, the online technical specification
- 3 shows that you have those structures.
- 4 Q. And the bill of materials is Plaintiff's
- 5 Exhibit 325?
- 6 A. That's correct.
- 7 Q. And the specification is Plaintiff's Exhibit 304?
- 8 A. Yes.
- 9 Q. All right. Dr. Almeroth, have we now found
- 10 everything required by element 1B of claim 1 of the
- 11 '076 patent in the iPod classic 3?
- 12 A. Yes, we have.
- 13 Q. Should we check that off?
- 14 A. Yes, please.
- 15 Q. All right, Dr. Almeroth, let's turn to element 1C,
- 16| a "means for receiving control commands from a user of
- 17 said player." What is this from a user's point of view?
- 18 A. This is the part of the iPod that allows you to
- 19 input user commands, to press the buttons, whatever you
- 20 need on the device to think about, "Okay. I want to skip
- 21 forward or go back or select a song or play a song."
- 22 That's the interface for accepting commands.
- 23 Q. And is there a claim definition that tells you
- 24 what the function and the structure are for this?
- 25 A. Yes, there is.

- Q. I'm putting up on the screen now Demonstrative
- 2 Exhibit 1035. Is that the definition for element 1C?
- 3 A. Yes.

equivalents."

- 4 Q. Could you please explain it?
- 5 A. Certainly. This is also means-plus-function.
- 6 There's a function, and that's -- it mimics the claim 7 language.
- And then there is also a structure. And it says, "The structure corresponding to the 'accepting' function can be the following structures and
- So, just like before, there is now a list of

 Items 1 through 4; and you have to find one of those -- I

 have to find one of those that is the same or equivalent
- 15 to what's on the iPod.
- 16 Q. Focusing now just on the function, Dr. Almeroth,
- 17 did you find in the iPod classic 3 that there is
- 18 structure that performs this identical function of
- 19 accepting control commands from a user?
- 20 A. I did.
- 21 Q. And where did you find that?
- 22 A. That is the buttons on the device itself. And
- 23 that's also supported by what's, for example, in the user
- 24 guide that describes the buttons you have to press to
- 25 make it operate. That's what I found.

- Now, turning to the structure, what is the Q. structure that is described in the claim, according to this definition, for that function?
- 4 Α. The structure that I've identified is "a keyboard."
- 6 Now, does an iPod -- I mean, it doesn't have a keyboard like on this computer here where you could write a letter, right? 8
- 9 No, not that kind of keyboard. Α.
- 10 Why do you say there is a keyboard on the iPod or 11 the equivalent?
- 12 Well, the keyboard is a broader term than just the Α. kind of keyboard you have on a desktop computer or that 13 I mean, the word literally comes 14 you have on a laptop.
- 15 from a board of keys. And, so, the structure that the 16 iPod has is exactly that, a set of keys that you have on
- the device itself. 17

Yes.

- So, in your opinion, in 2001 to somebody skilled 18 in this art, are the four buttons on the iPod a structure 19 which is identical or equivalent to a keyboard as defined 20
- here?

Α.

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- 23 And did you do anything to confirm that view? Q.
- Yes, I did. One of the sources of information --24 Α.
- 25 again, I believed it to be so; but then I went to find

- 1 additional information that would corroborate my opinion,
- 2 something that existed in the literature that would allow
- 3 me to reach this conclusion.
- 4 Q. What did you find?
- 5 A. I used an IEEE dictionary -- it's a technical
- 6 dictionary used by people of skill in the art -- to look
- 7 up, for example, what a choice device was, a way of
- 8 entering in choices.
- 9 Q. I'm showing you now Plaintiff's Exhibit 767. This
- 10 is the cover. I realize it's very hard to read. Can you
- 11 just tell us what this is?
- 12 A. Sure. It says, "The IEEE Standard Dictionary of
- 13 Electrical and Electronics Terms, Sixth Edition."
- 14 Q. And is that a standard reference in your field?
- 15 A. Yes, sir, it is.
- 16 Q. And the Sixth Edition relates to what time period?
- 17 I'll blow this up for you. I'm sorry.
- 18 A. This is the time period from 1996.
- 19 Q. Okay. Now, drawing your attention to page 11 of
- 20 Plaintiff's Exhibit 767, I think you were talking about
- 21 the choice device; is that right?
- 22 A. That's correct.
- 23 Q. How did this affect your opinion?
- 24 A. So, if you look at the definition of a choice
- 25 device, what it says is "A logical input device used to

make a selection from a set of predefined menu options in a graphical system. A typical physical device is a function keyboard or a set of function keys."

So, what's important here is that last part,
"A typical physical device is a function keyboard or a
set of function keys." And that's describing the
function keyboard or a set of function keys as being
what's on this device.

We may think about a keyboard as being lots of keys, but what this is saying is it doesn't have to have lots of keys. It can have a few keys and it still be a keyboard.

- Q. Now, if Apple were to come in and say this is
 actually not literally a keyboard, what's your response
 to that?
- 16 A. Well, first of all, I would disagree. I think

 17 that this is literally a keyboard, that these buttons on

 18 here are literally a keyboard.

But even if it's not literally a keyboard, it's equivalent to a keyboard because the differences between a full desktop keyboard and the buttons on here are insubstantially different for performing this function.

24 Q. The function is?

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25 A. It's not this function; it was the function from

- 1 1035.
- 2 Q. Let me put that back up on the screen.
- 3 A. Right. This function, for "accepting control
- 4 commands from a user."
- 5 Q. So, how --
- 6 A. The difference --
- 7 Q. Sorry. Go ahead.
- 8 A. The difference with respect to a keyboard versus
- 9 the keys on here is insubstantially different. It's
- 10 equivalent, because they're both accepting control
- 11 commands from a user.
- 12 Q. How do you, with a big full-size alphabetic
- 13 keyboard -- what does the computer do to accept control
- 14 commands?
- 15 A. What actually happens is you physically press the
- 16 key and it makes an electrical connection and that
- 17 electrical connection goes to the processor and the
- 18 processor says, "Oh, the H key was hit." And then it
- 19 goes and starts trying to process that.
- 20 The same thing here. When one of these
- 21 buttons is pressed, a signal is --
- 22 Q. Sorry. You're referring now to an iPod?
- 23 A. Yes, sir. It is the iPod classic 3. When one of
- 24 these buttons is pressed, it sends a signal to the
- 25 processor so that the processor can handle that command.

- Did you find anything in the patent that informed 1 Q. your view of whether it's important that this keyboard have a lot of keys or a few keys?
- The patent specification talks about one 4 Α. I did. of the ways of accepting control commands or something that could be one of the ways of accepting control I believe it's in about column 36.
- I'll take you to column 36. This is 8 Q. Okav. Plaintiff's Exhibit 1, at page 27. And is this the right portion of the patent?
- 11 Α. Yes, it is. I think it's about line 14.

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me?

- 12 I'm going to draw your attention to the paragraph 13 starting about line 32. Is that where you were directing
- 15 That's right. "Allows the player to be more Α. interactive" -- oh, here it is, "The ability to navigate 16 the program using only audio prompts and/or small number 17 of buttons for a user interface make the playback system 18 19 which utilizes these features of the invention particularly attractive."
- 21 And how did that inform your opinion? Q.
- 22 That's another piece of evidence that comes 23 directly from the patent that says if somebody were to 24 argue that the keys on this iPod classic 3 aren't 25 literally a keyboard, that it would at least be

- equivalent.
- 2 Q. Dr. Almeroth, have we now -- have you now
- 3 explained some of the evidence for why the iPod classic 3
- 4 meets all of the limitations required in limitation 1C of
- 5 the '076 patent?
- 6 A. Yes, that's correct.
- 7 Q. And should we now check that element off?
- 8 A. Yes, please.
- 9 Q. All right, Dr. Almeroth. Turning to element 1D
- 10 now, the "means for continuously reproducing said program
- 11 segments in the order established by said sequence." Can
- 12 you explain what that is from the user's point of view?
- 13 A. Sure. From a user's perspective, if you have
- 14 songs on the device and you're playing a playlist, you
- 15 need the ability to continuously reproduce, continually
- 16 play the song so there's no hiccups in the song, play the
- 17 song and then when the song ends, to be able to go to the
- 18 next song on the playlist, to be able to play all of the
- 19 songs in a playlist in the order that's specified by the
- 20 playlist.
- 21 Q. Is there a definition of the means and the
- 22 structure for this claim?
- 23 A. Yes, there is.
- 24 Q. I'm showing you now Demonstrative 1037. Is that
- 25 the definition?

- A. Yes, it is.
- 2 Q. This one looks a little longer.
- 3 A. It is a little bit longer.
- 4 Q. Is it going to take a little more effort to get
- 5 through this one?
- 6 A. A slight amount.
- 7 Q. All right. Let's go to work.
- 8 What can you tell us about the function
- 9 identified for element 1D?
- 10 A. The function is very similar to the claim
- 11 language. "Continuously reproducing said program
- 12 segments in the order established by the sequence in the
- 13 absence of a control command."
- 14 Q. Now, just focusing on the function, did you find
- 15 that the classic 3 performs the identical function as
- 16 element 1D?
- 17 A. Yes, it does.
- 18 Q. Let's take the structure one part at a time. All
- 19 right?
- 20 A. Yes, sir.
- 21 Q. So, could you start with the first part of the
- 22 structure and explain what this is?
- 23 A. Yes. The structure here -- again it uses the word
- 24 "equivalents." But the structure here has two parts.
- 25 There is a hardware -- set of hardware components, and

then there is a software algorithm. So, the first part that I want to talk about is the hardware components that are required.

It says there "A sound card that includes a digital-to-analog converter, headphones or one or more speakers, and a general purpose computer programmed to perform the algorithm" that's described in Figure 3 -- which I showed previously a couple of items in figure -- or including specifically the following steps. That's what the court has laid out for the function and structure for this limitation.

- 12 Q. All right. Let's take it one bite at a time.
- 13 What's a sound card?

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- A. A sound card is a part of a device that can

 convert songs stored on a disk that are digital and

 represented as 1s and 0s and convert that into analog.
- 17 And the analog is the stuff that will come out of the
- 18 device that goes into your ear. It's the air vibrations.
- 19 That's the analog signal. And it can do that through
- 20 headphones or speakers.
- 21 Q. In plain terms, is the digital the 1s and 0s that
- 22 might be stored on the hard drive?
- 23 A. Yes, sir.
- 24 Q. And is the analog the electricity in the wire
- 25 going to the speaker?

- A. Yes.
- 2 Q. I realize that might be an oversimplification; but
- 3 for our purposes, is that a high-level description?
- 4 A. Yes, it is. You can think about getting from the
- 5 disk and how it's stored into your ear.
- 6 Q. This definition refers to a sound card with a
- 7 digital-to-audio converter. Is that what that is?
- 8 A. That's exactly what it does.
- 9 Q. What is a sound card? Is that hardware or
- 10 software?
- 11 A. It's hardware.
- 12 Q. Now, what did you find in the iPod classic 3 that
- 13 is either a sound card with a digital-to-analog converter
- 14 or the equivalent?
- 15 A. There is a -- the structure that provides the
- 16 digital-to-analog converter -- the sound card -- is a
- 17 chip by a company called "Wolfson." It's a digital
- 18 signal processor that does the digital-to-analog
- 19 conversion.
- 20 Q. Is the chip a piece of computer hardware?
- 21 A. Yes. It's one of the components that goes onto a
- 22 circuit board.
- 23 Q. How did you determine that the iPod has a Wolfson
- 24 chip?
- 25 A. Through the bill of materials and also through the

- chip schematics.
- 2 Q. Okay. I'm showing you now Exhibit 325 --
- Plaintiff's Exhibit 325. Is that the bill of materials?
- 4 A. Yes. We've seen this once or twice before.
- 5 Listed in here is the digital-to-audio
- 6 conversion DSP that's used as part of the iPod classic 3.
- $7 \mid Q$. This is really tiny; so, I'll try to blow up the
- 8 right part. You tell me if I've done that.
- 9 Is that it?
- 10 A. Yes, it is. It's right here (indicating), Wolfson
- 11 Microelectronics. There is a number there that's pretty
- 12 hard to read. It's WM8731LEFL.
- 13 Q. WM1783LEFL, is that it?
- 14 A. No. WM8731LEFL.
- 15 Q. All right. What's the significance of that?
- 16 A. That is the number of the chip -- the one that's
- 17 actually used in the classic 3. And it talks here about
- 18 a codec that's used for doing the decoding from the
- 19 digital into the analog.
- 20 Q. What does a codec have to do with a sound card?
- 21 A. That is the chip that is the sound card.
- 22 Q. Now, were you able to look at any other documents
- 23 that gave you information about using a Wolfson CODEC in
- 24 the iPod classic 3?
- 25 A. Yes. Now we can go a layer deeper and look at the

- hardware schematics.
- 2 Q. Okay. I'm now showing you Plaintiff's Exhibit 89.
- Is that the chip schematic for the iPod classic 3?
- 4 A. Yes. And the part that we're interested in here
- 5 is what's going to be on page 7 for the audio
- 6 digital-to-analog converter that I mentioned previously.
- 7 Q. Let's just get oriented. Again, this is using
- 8 this code name iPod Q14?
- 9 A. Classic 3. Q14 is classic 3.
- 10 Q. And what is this page of the chip schematic?
- 11 A. This is the table of contents that lists the
- 12 different components with different diagrams that are
- 13 related to the different structures that are on this
- 14 page.
- 15 Q. So, we're looking here for the audio DAC at which
- 16 page?
- 17 A. That's at page 7.
- 18 Q. And what are we going to find on page 7?
- 19 A. What we'll find is a chip. It will be represented
- 20| as a rectangle; and that chip will have a number of
- 21 inputs and outputs, very small wires or parts of the
- 22 circuit board that will connect that digital audio
- 23 converter to other parts of the device.
- 24 Q. All right. Let's look at page 7 of Plaintiff's
- 25 Exhibit 89. Is this it?

- A. Yes, it is.
- Q. I realize it's hard to see. I'll blow up the relevant part of the drawing.
- 4 A. Right. That's about right here (indicating).
- 5 Q. Okay. If we blow that up, what do we see?
- 6 A. I understand it's a little bit hard to see. But
- 7 if you look at the number that's on this rectangle right
- 8 here (indicating), that's the WM8731LEFL that is the
- 9 Wolfson digital-analog converter.
- 10 | Q. And just to be clear, this is a drawing that shows
- 11 what with respect to an iPod? What parts are we looking
- 12 at?
- 13 A. This is the part here -- this is the chip
- 14 (indicating), and then these (indicating) are the lines
- 15 coming into and out of that chip that connect to other
- 16 places on the circuit board and other parts of the
- 17 circuit board. For example, the headphones amplifier is
- 18 on here as well.
- 19 Q. And if you'd just point to one of the devices,
- 20 where is the chip inside the iPod?
- 21 A. It's on the inside. You'd have to open it up to
- 22 see the circuit board that sits behind -- inside this
- 23 case.
- 24 Q. All right. Now, Dr. Almeroth, in your opinion, as
- 25 one of skill in the art -- or looking from the

- 1 perspective of one of skill in the art, as of 2001 was
- 2 the Wolfson CODEC, or DSP, identical or equivalent to a
- 3 sound card that is stated in this claim for the
- 4 digital-to-analog converter?
- 5 A. Yes, it is.
- 6 Q. All right. Dr. Almeroth, just taking this one
- 7| bite at a time again, after the sound card, the next
- 8 piece of structure is headphones?
- 9 A. Yes, it is -- or one or more speakers. That's
- 10 correct.
- 11 Q. Did you find that the iPod classic 3 has either
- 12 speakers or a headphone?
- 13 A. It does. It comes with a set of headphones. They
- 14 were called "earbuds."
- 15 Q. And if we look at Plaintiff's Exhibit 108, the
- 16 user guide, did you find some evidence in the user guide
- 17 that's relevant to this question?
- 18 A. Yes. There's a picture that describes the things
- 19 that come with the device; and one of the things that
- 20 comes with the device here then is the headphones, the
- 21 Apple headphones that come with it.
- 22 Q. I'm showing you now page 44 of the user guide,
- 23 Plaintiff's Exhibit 108. Is this what you were referring
- 24 to?
- 25 A. Yes, sir, that's correct.

- 1 \mathbb{Q} . And what does the user guide tell you about the
- 2 headphones?
- 3 A. It tells you to plug them into the headphones port
- 4 and then place them in your ear. Sometimes they're
- 5 straightforward like this and --
- 6 MR. STEPHENS: Objection, your Honor. I don't 7 believe this is in his expert report.
- 8 THE COURT: Does he have this exhibit in the
- 9 report or --
- 10 MR. HOLDREITH: Yes, sir.
- 11 THE COURT: Where?
- 12 MR. HOLDREITH: It's in the summary which is
- 13 one of the appendices to the report that --
- 14 THE COURT: Do you have that -- all right.
- 15 We'll look at that at the break.
- 16 MR. HOLDREITH: Yes, sir.
- 17 THE COURT: Overruled for now. Go ahead.
- 18 MR. HOLDREITH: Yes, sir.
- 19 BY MR. HOLDREITH:
- 20 Q. Dr. Almeroth, the third bite in this physical
- 21 structure is a general purpose computer programmed to
- 22 perform an algorithm.
- 23 A. Yes.
- 24 Q. Did you find that in the iPod?
- 25 A. Yes, I did.

- Q. Can you explain that?
- 2 A. Certainly. A general purpose computer is the
- 3 basic components of a computer. It has a processor, it
- 4 has RAM, it has a power source, all of the things that
- 5 make up a general purpose computer or a device like one
- 6 of these. And I looked in the bill of materials and the
- 7 hardware schematics and confirmed that this device is, in
- 8 fact, a general purpose computer and that it has a
- 9 processor and it has the ability to execute computer
- 10 software code that corresponds then to that algorithm
- 11 that's on the page.
- 12 Q. Dr. Almeroth, have we now found all of the
- 13 physical structures that are listed on the definition
- 14 that relates to this claim element?
- 15 A. Yes, we have.
- 16 Q. All right. Let's now talk about the algorithm.
- 17 THE COURT: Okay. Ladies and gentlemen, we're
- 18 going to take a break. I'll ask you to be back at half
- 19 past.

- 20 (The jury exits the courtroom, 3:13 p.m.)
- 21 MR. HOLDREITH: Your Honor, I'm reading from
- 22 page 50 of Dr. Almeroth's second amended report
- 23 concerning infringement, dated February 28th of 2011. 0
- 24 page 50 --
- 25 THE COURT: Wait, wait, wait. The

765 second one dated what? 2 MR. HOLDREITH: February 28th of 2011, sir. 3 I can give you a cite from the third. I'm I have the second one up. It's still page 50 in 4 sorry. 5 the third, paragraph 88. 6 THE COURT: Okay. Tell me the page again. 7 MR. HOLDREITH: Yes, sir. Page 50. 8 THE COURT: Okay. Mr. Stephens, why is it you're thinking that he didn't mention earbuds and so 10 forth in the report? 11 MR. STEPHENS: That's not the point, your The point is he was saying specifically that 12 Honor. 13 Apple tells people to plug them together. That's not what this says. This says that there is a headphone jack 14 15 there to allow for the output of sound on connected 16 headphones. It's the difference between proving 17 inducement and a mere capability. 18 THE COURT: And the reference in the 19 exhibit -- in other words, you were using an exhibit 20 I took it it was from one of the manuals. there. 21 is that referenced in the report? 22 MR. HOLDREITH: Yes, sir. I've been handed a 23 It's Exhibit 3 to the report at page 46. image is reproduced. And that's Dr. Almeroth's summary 24 25 of his supporting evidence.

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   and law clerk.)
2
              MR. STEPHENS: Your Honor, I've got it here.
3
   I can hand it up if you'd like.
4
              MR. CORDELL: Your Honor, may I?
5
              THE COURT: Yes, please.
6
              MR. STEPHENS:
                             That's about putting it in your
   ear, not putting it in the iPod.
8
              THE COURT:
                          I'm not sure which report you're
   talking about because it isn't the copy -- I mean, I've
10
   mentioned before that I actually review these things and
11
   for some reason you're talking about pages and exhibits
   and so forth that we didn't get or maybe are labeled
12
13
   differently or something. So, if you've got another copy
14
   or a couple copies of reports out there that were
15
   exchanged, please see Ms. Mullendore so I can take a look
16
   at them.
17
              MR. HOLDREITH: I apologize for the confusion,
18
   your Honor.
19
              THE COURT: I'm not sure -- I'm not finding
20
   any 300-page Exhibit 3 listing anything.
              MR. HOLDREITH:
21
                             Your Honor, if I may --
              THE COURT:
22
                          There are some exhibits by
23
   letters; and there are some little small exhibits by 1,
24
   2, 3. What we're going to do is we're going to go ahead
   and take the recess. If you can come up with this, it
25
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   would be helpful to look at.
2
                              If I can explain, your Honor.
              MR. HOLDREITH:
3
   There are 25,000 pages of exhibits of which this is one.
   So, I can certainly provide the court with that box.
4
   They're also in binders behind Dr. Almeroth.
6
              THE COURT: Well, again, he's made the
   objection. You need to show where it is.
8
              MR. HOLDREITH:
                             Yes, sir.
9
              THE COURT:
                          It's not really his job to show
   it; and, as I said before, if I have the reports, I can
10
11
   go through them. But without them, I can't. So, why
   don't you figure out where it is in this report, if it
12
13
   is, and then let Ms. Mullendore know.
14
              MR. HOLDREITH: Yes, sir.
15
              THE COURT: We'll be in recess.
16
              (Recess, 3:19 p.m. to 3:29 p.m.)
17
              (Open court, all parties present, jury not
18
   present.)
19
              THE COURT: All right. Let me be sure I
20
   understand the objection, Mr. Stephens. You're saying
21
   that the Apple user manuals or instructions, whatever
22
   that comes when you buy the thing, don't tell the user to
23
   plug it in or you're saying his report didn't say that
24
   Apple says to plug it in?
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So, your Honor, they explicitly

MR. STEPHENS:

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   have dropped all claims of indirect infringement
   including inducement and contributory infringement.
3
   So --
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              THE COURT:
                          Okay.
                                  But answer my question.
5
              MR. STEPHENS:
                             I was about to. I apologize.
6
              So, his report does not say that.
7
              THE COURT:
                          Okay. The instructions do say
   plug it in and they come with the little earphones, but
8
   you're saying his report doesn't say somewhere that they
10
   say -- you say that he doesn't say that you say the
11
   earbuds are supposed to be put in. Is that what you're
12
   saying?
13
              MR. STEPHENS:
                             That's correct, your Honor.
14
              THE COURT:
                          Okav. Overruled.
15
              (The jury enters the courtroom, 3:30 p.m.)
16
              THE COURT: And just for record purposes,
17
   based on the diagram and what's there in the report, I'll
18
   overrule that.
19
              Go ahead, counsel.
20
                              Thank you, your Honor.
              MR. HOLDREITH:
   BY MR. HOLDREITH:
21
22
         Dr. Almeroth, I just want to go back for a second
23
   because there was a little discussion about this page of
   the user manual which is Plaintiff's Exhibit 108 at page
24
25
   44.
        What was it you were about to point out on that
```

document?

- 2 A. This is the "Plug them into the headphones port,
- 3 then place the earbud in your ear as shown." That comes
- 4 from the Apple user guide for classic 3.
- 5 Q. And did you conclude that the earphones are
- 6 designed and intended to be plugged into that ear port
- 7 and used to listen to music?
- 8 A. Yes. That's correct.
- 9 Q. All right. Let's go ahead and move to the
- 10 algorithm now in element 1D that we're looking at that
- 11 comes under the structure.
- 12 A. Yes. sir.
- 13 Q. Is that set forth in these three steps at the
- 14 bottom of the definition?
- 15 A. Yes, it is.
- 17 algorithm is?
- 18 A. An algorithm is a set of software instructions
- 19 that are part of the device. Those instructions are
- 20 executed by the processor, and they perform as the steps
- 21 indicate.
- 22 Q. Just so you can relate this to your description of
- 23 the patent, I'm going to put up a board. I'm now showing
- 24 you Demonstrative Number 1010. Is the set of steps for
- 25 element 1D -- is that related to these algorithms that

- lare shown on the board somehow?
- 2 A. Yes, it is.
- 3 Q. And can you explain that a little bit?
- 4 A. Certainly. The algorithm says before it gets to
- 5 the three steps -- it says (reading) the algorithm that
- 6 is illustrated in the flow chart at Figure 3 at
- 7 Items 233, 235, 237, 239, and 261 -- that's correct.
- 8 Q. And is that one of these algorithms listed on the
- 9 board?
- 10 A. Yes, it is. It's continuous play, and then there
- 11 are two further citations to the patent at -- the '076
- 12 patent at column 12, lines 10 through 13 and lines 21
- 13 through 25.
- 14 Q. Okay. So, for these three steps in element 1D
- 15 shown on this board, 1037, are we talking about the
- 16 continuous play algorithm generally?
- 17 A. Yes, we are.
- 18 Q. All right. Dr. Almeroth, let me start by asking:
- 19 Did you find this algorithm for 1D or its equivalent in
- 20 the iPod?
- 21 A. Yes. I did.
- 22 Q. And how do you go about finding out if this
- 23 algorithm is in the iPod?
- 24 A. There are a couple parts. The main part is to
- 25 look at the source code and find the steps of the

- algorithm in the source code itself.
- Q. So, is this one where you have to actually go in and read the computer code?
- 4 A. Yes, sir. This was one of the reasons that I had
 5 to go to Houston and look at the source code on the Apple
 6 black box.
- Q. Are you able to determine if this algorithm is present just by pushing the buttons on the iPod and seeing if it plays continuously?
- A. No. That would have been insufficient. It might have helped me show that the function is present. But with respect to the structure and the algorithm and the steps in the algorithm, that, I would have had to look much deeper to look at the source code to find that algorithm.
- Q. Now, at a very high level, can you tell us just what's going on with these three steps? What's happening inside the computer?

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A. Certainly. The easiest way to understand what the algorithm does at a high level is to look at the first couple of words. What you're doing is for continuous play, the first step is to begin playback. Once you've begun playback, you play until that song completes; and then you transition to the next step. When playing that song finishes, you then now have to determine what the

next segment is by looking at the playlist and saying, "What's now the next song?"

Once you look at that next song and figure out what it is and where it's stored on the device, you then play that song. And then Step 3 says to repeat that Step 2 to keep working through the songs on the playlist until you get to the end.

- All right. Now, is this in the printed source 8 Q. code in the part that you were able to print out?
- Yes, it is. There is an exhibit with about 300 pages of source code that I printed, and I printed the 11
- parts of the source code that were relevant to the steps 12
- 13 of this algorithm.

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- Dr. Almeroth, do you have a thin binder there 14 Q. 15 which refers to Exhibit 771? Yes?
- 16 Α. Yes, sir, I do.
- 17 Q. And I'm not going to put it up on the Okav. 18 screen; but looking at 771A, is that one of the tabs in 19 your notebook?
- It is. 20 Α.
- 21 And without disclosing the contents, can you 22 explain what 771A is?
- At a high level, what 711A [sic] -- plaintiff's 23 24 exhibit -- is, it's a description of the functions, which 25 files those functions are found in, and the line numbers

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774
1
   in that file.
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              THE COURT:
                          Okay. Excuse me. We went from
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   771A to 711A. Let's get the numbers correct, please.
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              MR. HOLDREITH: Yes, your Honor. It should be
5
   771A.
6
              THE WITNESS: I'm sorry.
7
   BY MR. HOLDREITH:
8
         Do I have it wrong?
   Q.
9
   Α.
         No.
10
   Q.
         All right.
11
   Α.
         I have it wrong.
                            It's Plaintiff's Exhibit 771A.
12
              MR. STEPHENS: Your Honor, we object to this
             This is one of the Rule 1006 summaries that
13
   exhibit.
14
   your Honor has already ruled --
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              THE COURT: Okay. I'm trying to find my copy
16
   of it.
17
              MR. HOLDREITH: Your Honor, for convenience, I
   bound it separately in a small binder. I'm now asking
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19
   about the A tab, which is a thinner document after the
   first large document.
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21
              THE COURT: All right. Why don't you, if
22
   you're going to use it and talk about it, first establish
23
   how it was prepared.
24
              MR. HOLDREITH: Yes, sir.
                                          I was --
25
              THE COURT:
                          It doesn't do any good to go
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through all of this and then have him object. I mean, let's see if you can lay a predicate, let him make his objection, and then we'll decide whether or not he can talk about it.

5 MR. HOLDREITH: Yes, sir. That's exactly 6 where I was going.

BY MR. HOLDREITH:

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- 8 Dr. Almeroth, as I said, without disclosing the Q. substance, can you explain what this document is?
- It is the functions that I've identified that relate to specific claim limitations. functions are found in a particular file. So, for each function I've included a file name; and then I've also included the line numbers that correspond to where that 14 function is found in the file name.

This summary contains the description of the source code for each of the limitations that has an algorithm or relates to the source code for -- in this case for the iPod classic Generation 3.

THE COURT: Okay. Let's not get too basic. But if you read this record, maybe you should start off with which patent he's speaking about and then which claim he's speaking about and then what we have there or you have no identification.

MR. HOLDREITH: Yes, sir. He got a little

- $oxed{1}$ ahead of me. I'll step through it piece by piece.
- 2 BY MR. HOLDREITH:
- 3 Q. I'm going to ask little questions, Dr. Almeroth --
- 4 A. Yes, sir.
- $[0, 1] \ [$
- 6 describe them more general.
- 7 Is this a summary of the source code that you
- 8 printed out where you prepared your narrative summary of
- 9 how that source code operates?
- 10 A. Yes, it is.
- 11 Q. And did you take your summary directly from the
- 12 source code that's printed out as Exhibit 713?
- 13 A. Yes, I did.
- 14 Q. In your summary are you translating the computer
- 15 language into more human readable language?
- 16 A. That's correct. I am.
- 17 Q. Did you fairly and accurately summarize those
- 18 parts of the code that you found to be important to this
- 19 algorithm?
- 20 A. Yes.
- 21 Q. Did you organize your summary by claim
- 22 limitations? 1D, for example?
- 23 A. Yes, I did.
- 24 Q. Okay. And is the source code that you summarized
- 25 in this document voluminous?

A. Very much so.

- Q. Is the source code available here in the courtroom for inspection by Apple's lawyers?
- 4 A. Yes, it is.
- 5 MR. HOLDREITH: Your Honor, I offer
- 6 Exhibit 771A under Rule 1006 as a summary of voluminous
- 7 documents to aid the court and the jury to understand
- 8 voluminous documents that can't be conveniently examined.
- 9 THE COURT: And my guess is every lawyer in
- 10 the room knows exactly which patent and which claim
- 11 you're talking about, but you still haven't stated that
- 12 for the record.
- 13 MR. HOLDREITH: I apologize, your Honor. It
- 14 is '076 claim 1.
- 15 BY MR. HOLDREITH:
- 16 Q. Is that right, Dr. Almeroth?
- 17 A. It includes more than claim 1. It includes more
- 18 than claim 1. It's claim 1 of the '076, claim 2,
- 19 claim 3, claim 14, and claim 15.
- 20 MR. HOLDREITH: I now offer Exhibit 771A under
- 21 Rule 1006.
- 22 THE COURT: Okay. State your objection.
- 23 MR. STEPHENS: Your Honor, we object. This is
- 24 not the summary of writings, recordings, or photographs
- 25 under Rule 1006. This is Dr. Almeroth's opinions about

infringement. If this were just a compilation of source code, it might be different; but he is expressing opinions here about how the source code works and what claim elements they relate to. This is really nothing more than moving a rewritten expert report into evidence, your Honor.

There is no underlying writing, recording, or photograph that this summarizes because there is no underlying writing, recording, or photograph that maps the claim elements onto source code.

THE COURT: All right. Given the complexity of the case and the complexity of trying to in some way put it in a method or a structure that a jury can look at, I'm going to allow this in as a summary of what the doctor's opinion is as to what the source code says as to each of these.

Now, ladies and gentlemen, just because he says it's his opinion as to what the underlying source code says doesn't mean you have to take that. You're going to be instructed that you will evaluate every witness, including all of those who are allowed to give opinions, based on whether you believe them or not and whether you believe all or any part of their work.

Given the nature of this case and the complexity of it, I am going to allow him to admit this

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elements.

MR. HOLDREITH:

Okay. But I'm going to allow him THE COURT: to testify about it. Otherwise, he could never get to show whether he has actually testified about it or not.

> Well, your Honor, he has his MR. STEPHENS:

report, of course, which --

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THE COURT: I understand that. I mean, I do understand -- given the size of the reports in this case and the problems there, I understand that. But on the other hand, there are -- I'm going to give the witness some leeway to try to condense down his testimony and put it in a form that's understandable to the jury.

MR. STEPHENS: But, your Honor, he should have done that in his report instead of giving us a document done with 25,000 pages. Now they've slimmed it down and made it much more palatable and understandable. We didn't have the benefit of that in this case until they produced this or gave this to us in the last day or so.

THE COURT: Okay. That objection is overruled.

MR. STEPHENS: Thank you.

THE COURT: Go ahead.

18 BY MR. HOLDREITH:

- 19 Q. Dr. Almeroth, let me start with this. Was this
 20 summary in your original report that you provided months
 21 ago?
- 22 A. Yes, it was.
- Q. And is that something that was provided to Apple months ago?
- 25 A. Months ago, yes, sir.

- 1 Q. Okay. Dr. Almeroth, using that summary, can you 2 now explain to us how you found the algorithm that's 3 shown for element 1D in the source code for the Apple 4 iPod classic 3?
- A. Yes. The way that I found it was to search through the source code files and to find the steps of the algorithm inside of that source code.
- 8 Q. Can you walk us through that summary at a high 9 level?
- 10 Certainly. At a high level, what is happening and 11 what's described in this summary is in the source code 12 you select a song to begin playback. And once you've selected that song and begun playback of that song, that 13 song will continue, as long as the user doesn't enter any 14 15 commands, until that song ends. And when that song is over, other code will be called to say, "The song is 16 17 I now have to figure out what the next song on the playlist is." And once that song is determined, then 18 19 that song will be played. And then you repeat that step 20 until the end of the playlist.
- Q. Now, without going into deep detail, can you show us, using the code, your method for finding these algorithms?
- 24 A. Yes, I can.
- 25 Q. Okay. Where should we start?

- 1 A. In Plaintiff's Exhibit 713. That is the excerpt
- 2 of code that I printed for the iPod classic 3. It's
- 3 about 300 pages. It represents all of the functions and
- 4 line numbers and files that were cited in this
- 5 Exhibit 771A.
- 6 Within this source code then, I would like to
- 7 go to page 120.
- 8 Q. All right. Here we go. 120, did you say, or 121?
- 9 A. 120.
- |0| Q. Okay. 120. Is this the page (indicating)?
- 11 A. It looks -- yes, it is. And if you could blow up
- 12 the source code from about here (indicating) down through
- 13 this function.
- 14 Q. This part here (indicating)?
- 15 A. Yes, sir. Okay.
- 16 Q. What is this?
- 17 A. Source code. And this is source code for a
- 18 function called "SelectSong." These initial three --
- 19 four lines are what are called "comments." All of the
- 20 comments start with a "//." There is another comment
- 21 here (indicating), another comment here (indicating).
- 22 Those are instructions not to the processor, but they're
- 23 written by the programmer so somebody reading this code
- 24 would understand what's happening in this code.
- Otherwise, what you see here (indicating) is a

- 1 computer language called the "C programming language,"
- 2 just the letter C is the name of the language. And you
- 3 see that there is a function here (indicating), and this
- 4 is the identifier. This is the title of the function,
- 5 and it's called "SelectSong."
- 6 Q. Let me stop you there, Dr. Almeroth, just to
- 7 understand. So, does the computer ignore these lines
- 8 that start with two slashes?
- 9 A. Yes. They're just for a human reading the source
- 10 code.
- 11 Q. Why would you put comments for a human in source
- 12 code?
- 13 A. Because the word "SelectSong" is easier and more
- 14 quickly to understand than looking through all of the
- 15 details in here. So, it's basically a signpost that says
- 16 this is the function called "SelectSong."
- 17 Q. You called this a function. What does a function
- 18 mean?
- 19 A. A function is a collection of specific source code
- 20 statements that performs a slightly higher function. All
- 21 right? So, the higher-level function here is the
- 22 selection of a song. And now we have to break that down
- 23 into a bunch of specific program instructions.
- 24 Q. All right. Continue.
- 25 A. Part of the function is what's called a

"variable." And a variable is a part of the memory that stores some information. The variable name that I want to point to here is "index." And what "index" is is it's a number that represents where in the playlist you've selected the song.

Q. Is that like the --

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MR. STEPHENS: Objection, your Honor. Again this is not in his report. His report doesn't go into anywhere near this level of detail.

THE COURT: Overruled.

A. The index is the place in the playlist that you're currently at.

And the way that this function is called is either with selecting on a playlist or selecting -- scrolling through the playlist and selecting on a particular song. Then this function is called that says, aha, I either want to play the first song on the list; or if the user has scrolled down and wants to play the seventh song on the playlist, then that will be represented by this information that's passed into the program.

- 22 BY MR. HOLDREITH:
- Q. Let me stop you for a second. Is the index a number, like 1, 2, 3, 4, 5?
- 25 A. Yes, it is.

- Q. And does it have to do with something to do with are we in the first or second or third or fourth place in the playlist?
- 4 A. That's correct. This is the index number into the playlist that tells you where it's at. It's recorded as a variable, and it's given a name so that the processor knows, ah, I have to go and use this number to do something.
- Now what happens is there are some other

 10 English language words here that are "if" statements.
- 11 And what happens in these "if" statements is you'll check
- 12 a condition. And, for example, the one that
- 13 Mr. Holdreith has highlighted at 843 says if this index
- 14 value that you passed in -- and the "!" and "=" means if
- 15 it doesn't equal. If it doesn't equal an invalid song
- 16 index -- this is why this takes so long. It's a double
- 17 negative. It's saying if it doesn't equal an invalid
- 18 song index. So, it's a valid song index --
- 19 Q. Wait a minute. Slow down. So, if it doesn't
- 20 equal an invalid --
- 21 A. Then it must be valid.
- 22 Q. Okay. So, you're looking for a valid index here?
- 23 A. And then -- well, you have a valid index. Okay?
- 24 It's just a check to make sure that however you got to
- 25 this part of the code, that you got there with a valid

index number. All right?

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Now what you have to do is "GetIndexedSongPlayState." And just in the interest of time, let me speed up a little bit. And what's most important here is that you do a couple of checks and you eventually get down and it says status equals PlayCurrentSelection. And then again you have this index value.

PlayCurrentSelection is another function somewhere off in the code. So, then we have to go and look at that source code. But what I can tell you is I've looked at this source code, and what it does is uses this index number to play the current selection that's identified by that index.

- Let me stop you for a second, Dr. Almeroth. Q. Do these -- does the PlayCurrentSelection function -- is that just printed as the next thing in this code? you just follow it and read it like a book, one page to 18 19 the next?
- Sometimes source code is called a "bowl full Α. No. of spaghetti." You sort of have to seize on one end of 22 the noodle and follow it all of the way through. 23 PlayCurrentSelection will potentially be in a different file, certainly in someplace else in the code.
- 25 So, you have to jump to some completely other page Q.

to find out what that does?

- A. You'll have to remember what was happening here, and then you'll have to go to that source code and make sure that that source code does actually play the current selection.
- Q. Could you just explain this index that's used to play the current selection? Does that index represent something about the playlist?
- A. That's right. This index is the same index that was given to this function. There were some checks to make sure that the index was a valid number. Okay. It's a valid number. Okay. Go off and play that current selection.

And the idea of PlayCurrentSelection also is that it will return a status, so a status after you try and execute the function. Well, if everything is okay, then no error comes back. If something bad happens, then you get an error that comes back and something has to happen depending on whether there is an error or not.

But the one thing I wanted to point out is here is another line that says (reading) if status equals no error. Then what you're going to do is, for example, update the current track and you'll send a message. What this part of the code does right here (indicating) is just update the display.

- 1 Q. Dr. Almeroth, you're talking about roughly lines
- 2 857 to 866 now?
- 3 A. That's correct.
- 4 Q. Okay.
- 5 A. And what the user will see then is if they hit a
- 6 button that plays a playlist or selects a song, this will
- 7 then play that first song and then update the display.
- 8 Q. Okay. Have you finished displaying this part of
- 9 the code?
- 10 A. Yes, I have.
- 11 Q. And is there another part of the code that's
- 12 relevant to your explanation?
- 13 A. There is. As part of this algorithm, now what you
- 14 have to do is wait for the song to end. And part of the
- 15 code that's executed when the song ends is another
- 16 | function called "PlayerDone." Okay? And I've printed
- 17 out the relative code for PlayerDone, and that's on page
- 18 200. This was on page 120.
- 19 If you go to page 200, there will be a
- 20 function called "PlayerDone."
- 21 Q. Okay. Am I in the right place?
- 22 A. Yes. In the middle of the page is another one of
- 23 these comments that says that this is the function
- 24 PlayerDone.
- 25 And if you expand from here (indicating) to

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about the bottom of the screen, I'll try and explain what's in this source code briefly.
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- Q. About like that?
- 4 A. Yes, sir.

- 5 Okay. PlayerDone --
- 6 Q. We're now looking at -- I'm sorry, doctor --
- 7| Plaintiff's Exhibit 713 at page 200?
- 8 A. Yes.
- 9 Q. Go ahead.
- 10 A. What happens here is -- let me just skip some of
- 11 this. Again there are some checks here, some "if"
- 12 statements that will check some conditions in the code.
- 13 One of the things that you want to make sure is that the
- 14 player has stopped so that you're truly at the end of the
- 15 song, just to make sure that that's correct.
- 16 You will then continue down; and here is a
- 17 useful comment, at line 4443 that says "Go to the next
- 18 track if appropriate."
- Here it will check some conditions. If you're
- 20 only playing one song, it will stop. If you have
- 21 something else going on, it might have to stop. But if
- 22 you're in a playlist and there's a next song, there is a
- 23 command on the next page that will call another function.
- So, you've got some checks to make sure the
- 25 player is done with the current song and then now you

- have to go to the next song.
- 2 Q. Should we go to the next page?

and then go off and play that song.

- 3 A. Yes. And if you could just blow up this part
- 4 (indicating) right at the top.
- 5 Q. About here (indicating)?
- 6 A. Yes, sir.

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- And this is the line, 4459, that I wanted to point out to. That calls yet another function called "PlayerNext." But remember the algorithm required once you got done with a song, you had to find the next song
- So, this is the part of the source code that
 then calls "PlayerNext." And I believe this will be one
 of the last ones we have to look at for this code. But
- 15 let's briefly look at PlayerNext, and that's on page 196.
- 16 We have to jump to a different part of the code.
- 17 PlayerNext starts up here at the top
- 18 (indicating).
- 19 Q. About there (indicating)?
- 20 A. Yes, sir, and probably down a little further.
- 21 Let's try that, yes, to see if that's --
- 22 Q. It's a little hard to read. Should I make a
- 23 smaller box and we'll move it if we need to?
- 24 A. We will. That sounds good.
- 25 Okay. So, this is the PlayerNext function.

Again, it will do some checks here (indicating). For example, it will make sure that the player is stopped. It will check some other things and move down to the next part of the code. What this "PlaylistItem" is is it's the information about the track. We can go off and look at the file that has playlist information. It will then have track information, and that track information will include the artist and the title and the album and that kind of information about the song.

It will also include -- there is a unique number about that song that's called the "Persistent ID," or the "PID," that uniquely identifies that song; and then it's referenced here based on the PlaylistItem here.

Q. Let me stop you right there. Why does the computer use a number to identify a song?

- A. It's one of several ways of distinguishing that song from all of the other songs. That way when this source code says, "I've found the next song. I want to play that song," it will be able to use the information about the PlaylistItem to figure out where that song is stored, to access that song, and then to play it so it comes out of the speakers.
- Q. Now, is the number that identifies the song the same thing as the index that says we're now at the first spot in the playlist or the fourth spot or the sixth

spot?

- 2 A. No. That's different. The playlist index is -- 3 let me describe it as a more simple number. It just 4 points to where you are on the playlist.
- That part of the playlist -- here is the
 playlist -- I'm sort of doing this imaginary playlist top
 to bottom. And let's say you're on the third song.
- 8 There will be a corresponding track record information to 9 that song that's stored in the memory somewhere. And 10 when you go from the third song to the fourth song, that 11 will then point to a different part of the memory that 12 has information about the new song.
 - So, you can think about this almost as an index, which is why it's called an "index," that ticks through the playlist; and there is a corresponding part of the memory that points to information about that track as you move through that playlist.
- 18 Q. All right. What's next?
- A. Let's see. Let's get rid of this window, and
 let's focus on the code starting about here (indicating)
 through the rest of the page.
- 22 Q. About there (indicating)? A little further down?
- A. Little further down, little further, little
- 24 further.

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Right there, that's good.

So, then if you move this box back down so we can see the beginning of it.

Okay. Mr. Holdreith, I'm sorry to ask; but if you could resize this box so we can see the rest of the line.

Q. Yes. I'll do my best.

MR. STEPHENS: Could you also include the line numbers that you're referencing?

9 A. Perfect.

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- 10 BY MR. HOLDREITH:
- 11 Q. All right. Dr. Almeroth, what line numbers are we
- 12 looking at here?

second.

A. We're starting at line 4123. And just to be
14 accurate, this is on page 196. Let's just talk about
15 this. We'll come back and talk about the file in a

There is a statement here that says "while (true)." What "while (true)" means is to loop through this code forever. While (true). Okay? The only time that you stop looping through the code is when true becomes false, but true never becomes false. So, you have to have some way in the code to get out of that loop; and there is a couple of different ways called "breaks." So, if the code runs through and it runs into a situation, it will pop out of the code.

So, now let's see what this "while" loop does. What it says is -- here's a comment "find the next song in the playlist that actually plays or is selected."

What the processor will do is it will loop through this set of instructions, looking through the playlist to find something that actually plays or is selected.

Now, one of the instructions it does is it figures out what the nextTrackItem is. And the nextTrackItem calls the function

PlayerGetNextPlaylistTrack. That function will look at the index value and increment the index value to get you to the next playlist item. And then this loop here will check to make sure that it's something that can be played. If not, it will loop through again. But if it

is something that can be played, now you have the next

- Q. So, to put it in more simple terms, is this function just looking at the playlist to say, "Okay.
- 19 Where is the next song I can play?"

song that can be played.

20 A. That's correct.

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- 21 Q. Is there any more of this code we need to walk 22 through right now?
- A. I believe I want to go a little bit further in this code.
- 25 Q. All right.

To about line 4139. That's right. Α. Okav. what you have here is you'll check another couple of conditions; and as long as you have a song that can be played, you'll call either PlayerPlay or you'll call PlayerSelectInternal. And both of these functions relate to actually playing the song that you come up with next.

Now, the way this code will operate is you'll start with SelectSong. It will either be selecting the playlist so it will be the first index item or you can scroll through the playlist and say select Item 6. then the user will hit "play." It will call the function "SelectSong." That will queue up and play that song.

- 13 Then when it's done, PlayerDone is called. PlayerDone says as long as there's other songs on the 14 15 playlist, I'll call PlayerNext. That will queue up the 16 next song, and then that song will be played.
- 17 Q. Any more of this code we need to walk through right now? 18
- 19 Α. No, sir.

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Q.

- What you just summarized and showed in 21 Exhibit 713, is that what is summarized in Exhibit 771A 22 for claim 1 of the '076 patent, element 1 -- are we on D?
- 23 Α. Yes.
- 24 It is.
- 25 And, Dr. Almeroth, what does that have to do with Q.

- this algorithm for element 1D which is beginning with the program segment identified by a ProgramID contained in a Selection_Record and so on?
 - A. The source code that I've shown you is the source code that implements these three steps of the algorithm as required by the court's construction.
 - Q. Can you just --

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- MR. STEPHENS: Objection, your Honor. So, I specifically asked Dr. Almeroth in his deposition to identify, for example, the CurrentPlay variable; and he told me he could not do that. What we've had instead now is detailed description using stuff that's not reproduced in his report at all to have that same effect.
- THE COURT: All right. Can you show me where in the deposition that was?
- 16 MR. STEPHENS: Yes, I can.
- 17 It's page 256 of his deposition, starting at
- 18 line 7. There is a question. I say --
- MR. HOLDREITH: Could you give me just a 20 second to catch up, counsel?
- 21 MR. STEPHENS: Yeah, sure.
- MR. HOLDREITH: I may have an objection to what you're about to read.
- MR. STEPHENS: 256, the question is at line 7.
- 25 And then near the bottom of the page starting at line 22,

797 he says he hasn't identified in this text what we're 2 talking about. 3 MR. HOLDREITH: Well -- I'm going to object to the argument, your Honor. 4 5 THE COURT: Wait, wait. Let me... 6 I'm looking at the deposition -- and 7 this would be Dr. Almeroth's deposition of May 11, 2011, 8 Volume 1, page 256 to 257. 9 MR. STEPHENS: That's right. 10 THE COURT: It appears to the court that the 11 question was asked. The answer is slightly more 12 extensive -- actually quite a bit more extensive -- than 13 he hasn't identified that one thing. He was pointing out 14 various codes. 15 Keep in mind that the disclosure rules on reports under the Federal Rules and the deposition and 16 this district are not intended as a trap. 17 The disclosure rules -- federal disclosure rules are intended to allow a 18 19 party to understand what the testimony is going to be 20 about so as to prepare for cross-examination and 21 determine whether or not a deposition is needed. 22 Depositions are then intended to find out what they are 23 going to talk about. It was fairly clear from this that 24 this is what he's going to discuss; namely, the code.

The fact that he hasn't recited verbatim every word in

- his testimony is, in this context, not a valid objection; and I'm going to overrule that.
- Go ahead, counsel.
- 4 MR. HOLDREITH: Thank you, your Honor.
- 5 BY MR. HOLDREITH:
- 6 Q. Dr. Almeroth, I think we were discussing how the

code that you just summarized relates to the algorithm;

and I'm not sure if you had a chance to answer that

- 9 question. Will you just begin to explain that?
- 10 A. Could you restate the question?
- 11 Q. Yeah. The code in Exhibit 713 and the functions
- 12 that you just summarized, can you explain how that
- 13 relates to the algorithm for element 1D?
- 14 A. Sure. The code -- the source code that I've cited
- 15 is the source code inside the iPod classic 3 that
- 16 executes the algorithm that's described in the court's
- 17 claim construction for 1D.
- 18 Q. Now, when you look at the algorithm in the iPod,
- 19 do you have to find exactly these three steps? Is that
- 20 how you do the analysis?
- 21 A. No. It's these steps or the equivalent of these
- 22 steps. Again, the concept of equivalents can be applied
- 23 here as well.
- 24 Q. And for programmers, can you do an algorithm in
- 25 two different ways that are equivalent that use a

- different number of steps?
- 2 A. Yes, certainly.
- 3 Q. And do you have to find variables that have the
- 4 exact same names as the variables in this claim
- 5 construction, like "CurrentPlay" or "Selection Record"?
- 6 A. No. They could be different variable names. The
- 7 information could be stored in a different way inside of
- 8 the program. It's really about the algorithm as it
- 9 relates to performing the function.
- 10 Q. Let me ask you a general question. This source
- 11 code in the iPod that we just looked at is written in
- 12 which computer language?
- 13 A. It's written in C.
- 14 Q. And was the C computer language written and
- 15 specified and well-known by 2001?
- 16 A. Yes, it was.
- 17 Q. Were all of the instruction -- the functions or
- 18 commands in C that are used in the code that you
- 19 summarized, were those all known and parts of C that were
- 20 available to use in 2001?
- 21 A. Yes, they were. A computer language has a certain
- 22 syntax which is how you organize these statements on the
- 23 page. It has types of statements, like "while" loops,
- 24 "if" statements, "case" statements. Those are all part
- 25 of a specification for the programming language. In

- fact, when I went to school, the way that you would learn
- 2 a computer language would be to learn what all of these
- 3 statements meant and what the curly brackets meant.
- $\mathsf{4}|$ That's what it really means to understand how to learn a
- 5 language, and then we practiced how to write algorithms.
- 6 Q. All right, Dr. Almeroth. What is your conclusion
- 7 with respect to whether the algorithm set forth in the
- 8 definition of element 1D of the '076 patent is present
- 9 literally or equivalently in the iPod classic 3 source
- 10 code?
- 11 A. It is present.
- 12 Q. Should I check that one off?
- 13 A. Yes, please.
- 14 Q. All right, Dr. Almeroth. We now go to 1E?
- 15 A. Yes, sir.
- 16 Q. What is element 1E of the '076 patent?
- 17| A. It is a "means for detecting a first command
- 18 indicative of a request to skip forward."
- 19 Q. And for the user, what does that mean?
- 20 A. What that means is that the command has been
- 21 entered and accepted -- that's 1C. And now what you have
- 22 to do is determine what the character of that command is,
- 23 meaning determine that in this case it's a request to
- 24 skip forward. You have to translate a keypress into a
- 25 request to skip forward.

- 1 Q. Is this something that happens after the user
- 2 presses the button?
- 3 A. Yes, it is. It's a process of translating that
- 4 button press into, ah, now I have to do something else.
- 5 And in this case it's skip forward.
- 6 Q. And is that the computer that's figuring that out,
- 7 what did that button press mean?
- 8 A. Yes.
- $|\mathsf{Q}|$ Q. Now, I think this one may be one of the few that
- 10 is not disputed; but I'm not sure. So, I'm going to just
- 11 have you walk through it quickly. As to the function --
- 12 and the function, is that recited here in the claim
- 13 itself?
- 14 A. Yes, it is.
- 15 Q. And what's the function?
- 16 A. It's the "means for detecting a first command
- 17 indicative of a request to skip forward." That's the
- 18 function.
- 19 Q. Does the iPod perform the identical function?
- 20 A. Yes. it does.
- 21 Q. And did you review the source code for the iPod to
- 22 determine if it uses the same algorithm or the equivalent
- 23 algorithm to the one set forth in the definition for this
- 24 element?
- 25 A. Yes, I did.

- $\mathsf{I} \mid \mathsf{Q}.$ I'm not going to pause on what that definition is,
- $\mathsf{2}|\mathsf{\ but}$ are you prepared to fully explain that if you're
- 3 asked about it?
- 4 A. Yes, I am.
- 5 Q. Okay. What is your conclusion about whether
- 6 element 1E is present in the iPod classic 3?
- $7\mid\mathsf{A}$. That it is present and that this limitation is
- 8 infringed by the classic 3.
- 9 Q. Should we check that one off?
- 10 A. Yes.
- 11 Q. That was easy.
- 12 A. I agree.
- 13 Q. This last one, 1F, is this going to be longer or
- 14 short?
- 15 A. This actually might be short.
- 16| Q. All right. Well, let's start with what element 1F
- 17 relates to, this "means responsive to a first command."
- 18 What does it mean for the user?
- 19 A. What that means for the user in the earlier
- 20 limitations you've accepted -- by "you" I mean the iPod.
- 21 It's accepted the input. It's determined that it's a
- 22 skip to go forward. And now what you have to do is you
- 23 have to make that happen. You have to make the skip
- 24 forward command happen. The song that's currently
- 25 playing has to stop, and you have to determine what the

- $1\mid$ next song is and then play that next song.
- 2 Q. Is this a software algorithm again?
- 3 A. It is.
- 4 Q. And is there a definition that relates to this
- 5 one?
- 6 A. Yes, there is.
- 7 Q. Dr. Almeroth, I'm now showing you Demonstrative
- 8 Exhibit 1040. Is that the relevant definition that
- 9 relates to element 1F of the '076 patent?
- 10 A. Yes, it is.
- |11| Q. Now, let me pause at the function again. Is the
- 12 function identified at the top of Exhibit 1040 here?
- 13 A. Yes, it is.
- 14 Q. And can you just explain briefly what the function
- 15 is?
- 16 A. The function is, briefly, to stop playing the
- 17 currently playing song -- that's discontinuing the
- 18 reproduction of the currently playing program segment --
- 19 and instead play the next song in the playlist. That's
- 20 briefly what that limitation is about.
- 21 Q. Let me ask you: With respect to the function, did
- 22 you find that the iPod classic 3 has code that performs
- 23 the identical function to the one shown on demonstrative
- 24 1040 which is the definition for element 1F?
- 25 A. Yes.

- Q. All right. Let's then look at the algorithm portion. Is that the three numbered steps near the bottom of the board?
- 4 A. Yes, it is.
- Q. With a high level of generality, can you explain what this algorithm is?
- 7 A. Certainly. This algorithm has the steps of
 8 figuring out what the next song in the playlist is that's
 9 playable and then resetting the CurrentPlay value to the
 10 record number indicated by the Selection_Record. Okay?
 11 And then you fetch and play that item.
 - What that means at a high level is you've got the playlist. You have to scan through it, find the next playable item; and then you have to make sure that you have the Selection_Record which is the index value, the number that's unique for that particular song, so that you can use that information to then play that song.
- 18 Q. Now I want to pause on the "segment of the19 appropriate LocType."
- 20 A. Yes.

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- 21 Q. At a high-level generality, what does that mean?
- 22 A. The "segment of the appropriate LocType" is that
- 23 within the playlist you have to find the item in the
- 24 playlist that's of the appropriate LocType.
- 25 Q. And there was some discussion with Mr. Call about

- 1 LocTypes. Were you in the courtroom for that?
- 2 A. Yes, I was.
- 3 Q. He talked about subject announcements, like you're
- 4 about to hear music.
- 5 A. Yes.
- 6 Q. Is that something that could be one LocType?
- 7 A. Yes. There were subject announcements that were
- 8 "S." There were "T" for topic announcements. There were
- 9 program segments which were "P." It was one example from
- 10 the patent that described different kinds of LocTypes.
- 11 Q. He also did talk about a music program, a song.
- 12 A. Right. That's a type.
- 13 Q. And could that be a LocType of like a program
- 14 LocType?
- 15 A. That's right. It would be like a "P," a "P" type.
- 16 Q. Okay. Now, for this patent claim, did you have to
- 17 find that the playlist had to have different LocTypes in
- 18 the same playlist? Did you have to be able to have both
- 19 announcements and songs?
- 20 A. No. That's not a requirement of this claim. If
- 21 you look through what the court has said is the
- 22 construction for this claim, it doesn't say that you have
- 23 to have multiple different kinds of LocTypes in a
- 24 sequencing file, in a playlist.
- 25 Q. Okay. So, although Figure 5 that Mr. Call

- 1 testified about shows different LocTypes in one file,
- 2 announcements and music, does this claim permit you to
- 3 have all the same LocType, all songs or something?
- 4 A. Yes, in fact, it does. There is not a restriction
- 5 in this claim about having subjects or topic
- 6 announcements or having any requirements about having
- 7 multiple LocTypes within the playlist.
- 8 Q. Okay. Now, which one does iPod do? Does it do
- 9 all programs, or does it do programs mixed with other
- 10 types?
- 11 A. The playlists in the iPod all use the same type of
- 12 content. They're all program files.
- 13 Q. And, so, does the iPod classic 3 have the ability
- 14 to store a playlist that's ProgramIDs that just
- 15 identifies songs and the order that you want to play them
- 16 back?

- 17 A. Yes. That's exactly right.
- 18 Q. And is it insubstantially different --
- 19 MR. STEPHENS: Objection, your Honor. I've
- 20 been holding off, but this is a lot of leading going on.
- 21 THE COURT: I think on questions like this
- 22 I'll sustain that.
- 23 MR. HOLDREITH: All right, your Honor. I'll
- 24 proceed in a more inquisitive fashion.

BY MR. HOLDREITH:

- Q. Dr. Almeroth, are there substantial differences for the function in this claim between using an ordered list which is just the same type, all programs, or using a list which is different types?
- A. There are not substantial differences in the function. Again, focusing on the function, it's specifically with respect to the skip command. And the function doesn't require that there be multiple LocTypes
- or different types of content or subject announcements or any of those requirements as part of the function.
- 12 Q. So, when you -- does the iPod scan through a list 13 of items in the playlist?
- 14 A. Yes, it does.
- 15 Q. And in an iPod, how do you know that the next one 16 is going to be of the appropriate LocType?
- A. The way that the iPod is specifically programmed is all of the items on the playlist are of the program type. For example, they might all be songs; and the device is specifically programmed to work through the
- 21 list of programs and determine which is the next one on
- the list and to be able to play the ones that are
- 23 playable.
- Q. Now, if all the members on the iPod playlist are of the same type, if you already know that, do you need

- 1 to put an extra character into the record identifying 2 that song to tell you what type it is?
- 3 A. No. You can almost imagine a Figure 5 where all4 of the types are P and all of the ProgramIDs for the
- 5 Selection_Records that point to the files are present.
- 6 When you program that, because all of the Ps are there,
- 7ert you don't actually need to include the P values. I mean,
- 8 the code is complex enough that you don't have to look at
- 9 a LocType to determine that the next type of record is
- 10 program.
- 11 You know that all of the programs are of that
- 12 type; and, therefore, when you scan through the file to
- 13 find the next one, you can just find the next item that's
- 14 playable.
- 15 Q. Now, does a code for the iPod classic 3 have a
- 16 scanning algorithm that looks for the next segment?
- 17 A. Yes, it does.
- 18 Q. And is that something you can explain to us with
- 19 reference to the code?
- 20 A. Yes, I can.
- 21 Q. All right. Let's do that. Where should we look?
- 22 A. This is Plaintiff's Exhibit 713, and this again is
- 23 the code for the classic 3. This is the 300 pages of
- 24 excerpt that --
- MR. STEPHENS: Objection, your Honor. This is

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   inconsistent with his report.
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              THE COURT:
                          In what way?
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              MR. STEPHENS: So, in the report he says
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              THE COURT: And what part of the report are
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   you looking at?
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              MR. STEPHENS: I'm looking at Exhibit 3, which
   is the '076 patent classic 3 product.
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              THE COURT:
                          Okay.
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              MR. STEPHENS: This is page 13.
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              THE COURT: The chart?
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              MR. STEPHENS: Yes, the chart.
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              THE COURT:
                          Okav.
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              MR. STEPHENS: And in the right column, the
15
   first paragraph, it says, "The iPod classic performs all
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   of the steps of the algorithm but essentially combines
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   Steps 1 and 2 instead of scanning forward in the
   sequence" --
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19
              THE COURT: Okay. I've got a different page
   13 and a different chart.
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21
              MR. STEPHENS: Let me make sure I've got the
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   same version, your Honor. I thought it was.
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              I'm sorry, your Honor. I realize the mistake.
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   It's actually Appendix A to Exhibit 3. It's organized in
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   an unusual way.
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                          Do you have a copy of that?
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              THE COURT:
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              MR. STEPHENS:
                             I do.
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              THE COURT: Why don't you hand it to
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   Ms. Laurents.
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              MR. STEPHENS:
                             Sure. So, page 13 --
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              THE COURT: Okay. Ms. Mullendore has found
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   it.
        Okay.
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              MR. STEPHENS: The first --
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              THE COURT: All right. This is part of the
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   infringement contentions, then, right?
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              MR. STEPHENS: Well, this is one of the
   exhibits, one of the 25,000 pages of exhibits.
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              THE COURT:
                          Okay. But it's part of the -- I
   mean, it's entitled "Personal Audio Infringement
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   Contentions," if you look on page 1.
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              MR. STEPHENS: Yeah, but it's an appendix to
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   his expert report. It does --
                                  It's Appendix A to
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                          Right.
              THE COURT:
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   Exhibit 3, but the title then is "Personal Audio
   Infringement Contentions." Isn't that on page 1?
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21
              MR. STEPHENS: Yes, your Honor.
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              THE COURT: Okay. We're on the same deal
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   then.
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              Okay. So, I'm on page 13. What's the
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   problem?
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MR. STEPHENS: Okay. So, it says -- in the first full paragraph in the right column, it says (reading) the iPod classic performs all three steps of the algorithm but essentially combines Steps 1 and 2. Instead of scanning forward in the sequencing file to locate the next record and then incrementing the CurrentPlay variable, instead, the device increments the CurrentPlay variable to fetch the next record.

So, he's saying, in effect, there is no scanning; but he is about to explain a scanning algorithm.

THE COURT: Okay. I think the way to handle that is point out what you see to be an inconsistency on cross-examination. I think you're entitled to do that but --

MR. STEPHENS: I guess my point is, your Honor, there is no algorithm described in the report; so, why should he be permitted to testify about such an algorithm, for scanning.

THE COURT: Okay. And as I said, I think that's an inconsistency that you can point out in cross-examination.

What this is about, ladies and gentlemen, is, as you can imagine with the complexity of this, I've ordered the people who are going to be testifying to

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provide complete reports. And one of the ways that you
may use to evaluate their credibility is if it's pointed
out that they have come up with something brand-new all
of a sudden without having put it in the report before,
you can evaluate that. On the other hand, given the
complexity, both sides have -- Dr. Almeroth and the
doctor working on the other side will have a chance to
explain that, and it will be up to you to evaluate that.
So, I'm going to overrule the objection; but I will point
out that the jury -- that one of the ways you can
evaluate somebody is if they're suddenly coming up with
something brand-new, that they've never thought of
before, why didn't they think of it before rather than
iust before you.
          I'll overrule the objection. Go ahead,
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counsel.

MR. HOLDREITH: Yes, sir.

And for the record, your Honor, the next line Mr. Stephens did not read says, "This implicitly" --

THE COURT: Well, you've got a chance to go over whatever you want with him. You don't need to be testifying.

MR. HOLDREITH: Fair enough, your Honor. ask the witness.

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BY MR. HOLDREITH:

- Q. Dr. Almeroth, did you explain -- well, let's start with the answer you were about to give. Can you explain in this code where you found this?
- 5 A. Yes. This was inside of Plaintiff's Exhibit 713 6 on page 196.
- 7 Q. Okay. So, I've now gone to page 196 of 8 Plaintiff's Exhibit 713. Is this the right page?
- 9 A. Yes, sir. And if you expand PlayerNext probably
 10 about down (indicating) -- that would be good.
- 11 Q. Right there (indicating)?
- 12 A. Yes.

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Now, what this function is is it's the PlayerNext that we saw before, that I had described previously. The reason why we're at this function now is because the user has pressed the "skip" button. So, instead of waiting for the song to end normally and then finding the next song using this same algorithm, now the user has pressed the "skip" button and prematurely you have to now end that song and then go to the next song. It turns out that different places in the code will trickle down to the same function for PlayerNext here.

So, this is the PlayerNext function we saw before. Now this function PlayerStopInternal makes sense in the context of, well, you're in the middle of playing

- 1 a song or somewhere in playing that song so you have to 2 stop that song.
 - And then if you scroll down below, you'll see the other parts of the algorithm that we saw before, that I've already described, the "while" loop --
- 6 Q. Should we go down there now?
- 7 A. Yes.

- 8 So, this is the "while" loop; and this is --
- 9 Q. I'm sorry. Which line?
- 10 A. At 4123.
- 11 Q. Okay.
- 12 A. And this is "Find the next song in the playlist
- 13 that actually plays or is selected." And this is the
- 14 part of the algorithm that determines what the next song
- 15 is that needs to be found and played.
- 16 Q. Now, Dr. Almeroth, this algorithm talks about
- 17| "fetching and playing the program segment identified by
- 18 the ProgramID contained in the new Selection_Record."
- 19 What's that talking about?
- 20 A. What that's talking about is just like before, as
- 21 the index value is incremented to go to the next song,
- 22 you then have to figure out what that song points to that
- 23 has the information about that song. And that's what's
- 24 called the "PlaylistItem" and it includes track data and
- 25 that track data is the album and the artist, the genre,

1 lots of other information and also includes what's called
2 a "Persistent ID," a "PID." And that PID is the
3 information that's used to find that song on the mass
4 storage device.

- Q. Now, could you just briefly describe what it's talking about when it says "resetting the current Number 2" in this definition, "resetting the CurrentPlay variable to the record number of that Selection_Record"? What's happening there?
- A. Certainly. As you find the new index value, the index value is going to change because it moves to a different song. Once the index value changes -- for example, from the sixth song to the seventh song -- now what you have to do is figure out what the new track information is, and that's what's referred to as the "Selection_Record." That's the thing that includes information about the song.

So, when 6 goes to 7, the song information is going to go from song information about the sixth song to song information about the seventh song. And that second step is about resetting the CurrentPlay variable to the record number of that Selection_Record.

- Q. Does Apple's source code for the iPod classic 3 do something like that?
- 25 A. Yes, it does.

Q. What does it do?

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- A. Through this part of the algorithm it will add a value to the CurrentPlay so that it goes to the next index value. And that's part of a function called
- And since you've asked specifically about this part of the algorithm, we probably want to go to that page.
- 9 Q. Okay. How do we do that?

"PlayerGetNextPlaylistTrack."

- 10 A. That is in -- it's the same exhibit, Plaintiff's
- 11 Exhibit 713 and now it's on page 194.
- 12 Q. Okay. We're now looking at Plaintiff's
- 13 Exhibit 713, page 194. What do we need to see here?
- 14 A. On this page -- it's down here (indicating). And
- 15 this is called "PlayerGetNextPlaylistTrack." And we'll
- 16 see on this code and the next page there is another
- 17 function that gets called.
- 18 If you could go to the next page.
- 19 Q. Okay. And just for the record,
- 20 PlayerGetNextPlaylistTrack is on which line?
- 21 A. Line 3975.
- 22 Q. Okay. Now going to the next page, this is
- 23 Plaintiff's Exhibit 713 at page 195. What do we see
- 24 here?
- 25 A. What we want to blow up is about line 4039. There

- 1 is a similar "while" loop that's here, but now you call
- GetNextPlaylistTrack. And I just wanted to show you that
- 3 this function calls another function calls another
- 4 function. What I really wanted to get to was this
- 5 function called "GetNextPlaylistTrack."
- 6 Q. Okay.
- 7 A. And that's on page 235.
- 8 Q. Okay.
- 9 A. And I promise this will be the last part that we
- 10 have to show for these steps of the algorithm.
- 11 Q. Page 235, did you say?
- 12 A. Yes.
- 13 Q. All right. About there (indicating)?
- 14 A. Yes, sir. GetNextPlaylistTrack and then -- that's
- 15 the name of the function. And if you scroll down a
- 16 little bit, I'd like to see what's from here (indicating)
- 17 down.
- 18 Q. Okay. Just for the record, your
- 19 GetNextPlaylistTrack is at which line?
- 20 A. At line 1112.
- 21 Q. And that's on Plaintiff's Exhibit 713, page 235?
- 22 A. Yes.
- 23 Q. All right. So, we need to go down a little bit?
- 24 A. That's correct.
- 25 And what this code starts to demonstrate is

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where you can increment the track index. So, the track index -- they changed the name of the variable from "index" to "track index," but it points to the same information.

And now what you're doing is you're using a convention that's part of the code that has "++." "++" is shorthand in this computer code for adding one to that index value. And there's a couple of different situations that it will check here. For example, if you have "repeat" off, what will happen. If you have repeat one track, that's an option that you can select, or repeat all tracks.

And what this source code will go through and do is increment that value of trackIndex. And then you would go back to PlayerNext, and then you would go through the PlayerPlay to play the song at this new trackIndex.

- All right, Dr. Almeroth. Can you now explain how the algorithms you just walked through in the iPod source code relate to the three steps shown for element 1F in the '076 patent?
- The source code that I've shown, starting with 22 23 PlayerNext and walking through some of those other algorithms, performs the equivalent steps that are described on this board, Plaintiff's Exhibit 1040, that

- 1 represents the court's claim construction with respect to
- 2 element 1F.
- 3 Q. Did you summarize the code that you just explained
- 4 in Exhibit 771A under element 1F?
- 5 A. Yes, I did.
- 6 Q. All right, Dr. Almeroth. With respect to
- 7 element 1F after analyzing the source code, what is your
- 8 conclusion about whether the iPod classic 3 meets
- 9 limitation 1F of the '076 patent?
- 10 A. It meets the limitation 1F.
- 11 Q. Can we check that off?
- 12 A. Yes, sir.
- 13 Q. Dr. Almeroth, have we now gone through your
- 14 opinion whether all of the elements of the '076 claim 1
- 15 are met by the classic 3?
- 16 A. Yes, sir, we have.
- 17 Q. And after looking at all of the material that you
- 18 looked at, including Apple's technical documents,
- 19 considering the testimony, reviewing the source code, did
- 20 you reach a conclusion about whether the iPod classic 3
- 21 infringes claim 1 of the '076 patent?
- 22 A. I did.
- 23 Q. What's your conclusion?
- 24 A. My conclusion is that claim 1 of the '076 patent
- 25 is infringed by the classic 3.

- 1 Q. There's a couple questions the law encourages me
- 2 to ask you now. Did you follow the court's claim
- 3 construction for each element when you did your analysis?
- 4 A. Yes, I did.
- 5 Q. For the means element, all of the means elements,
- 6 did you find that the iPod classic 3 performs the
- 7 identical functions to the ones in the claims?
- 8 A. Yes, I did.
- 9 Q. And for the means elements, did you find that the
- 10 iPod classic 3 has identical or equivalent structure to
- 11 the structure set forth in the court's claim
- 12 constructions viewed from the view of a person of skill
- 13 in the art in 2001?
- 14 A. Yes, sir, I did.
- 15 Q. All right. Dr. Almeroth, I'd like to switch to
- 16| something completely different for a few minutes. Do you
- 17| have a classic 3 there that you can just demonstrate what
- 18 happens on the classic 3 when you do some of these
- 19 algorithms?
- 20 A. Yes. I do.
- 21 Q. And, Dr. Almeroth, is there a camera there that
- 22 you can use to project that demonstration onto the screen
- 23 here?
- 24 A. There is.
- 25 Q. All right. Now, we just set this up to see if we

- 1 could get a little better view of the iPod; so, we'll
- 2 hope that it shows clearly.
- B A. I'm also going to hook up some speakers.
- 4 Q. All right. What is it that you are showing on the
- 5 big screen right now?
- 6 A. What I'm showing on the big screen is a classic
- 7 Generation 3.
- 8 Q. And can you just tell us what exhibit number that
- 9 is?
- 10 A. This is Exhibit 187.
- 11 Q. And that's a plaintiff's exhibit?
- 12 A. Plaintiff's exhibit.
- 13 Q. All right. So, what do we see when we look at the
- 14 front of this thing?
- 15 A. Not a whole lot. It's a little washed out. Let
- 16 me see if I can -- oh, wow. That works.
- 17 What you can see is a number of buttons at the
- 18 top; and it's a "back" button, a "menu" button, a "play"
- 19 button, and a "skip forward" button. In fact, let me
- 20 turn them on and there will be some color to it.
- 21 And then you see this wheel at the bottom, and
- 22| it has a "select" button in the middle of that device.
- 23 Q. That's the circle, little circle in the middle of
- 24 the great big circle on the bottom half of this thing?
- 25 A. Yes, sir. That's the "select" button.

- Q. And what just happened on the screen?
- 2 A. When I pressed the "play/pause" button, the device
- 3 came on. And what you see is that this is an iPod.
- 4 That's what's described here at the top (indicating).
- 5 And then you have a number of menus. There's a music
- 6 menu, a playlists menu, an extras, a segments, and a
- 7 backlight menu.

- 8 Q. All right. Dr. Almeroth, can you now demonstrate
- 9 how you go to a playlist on this iPod?
- 10 A. Sure. You use the Clickwheel to go to playlists
- 11 and then press the middle button to select it.
- 12 And now what you see is three menu items, "PA
- 13 Playlist 1," "PA Playlist 2," and then an "On-The-Go"
- 14 selection.
- 15 Q. What are those PA playlists?
- 16 A. The "PA" stands for "Personal Audio." Those are
- 17 playlists that I prepared and loaded onto this device.
- 18 Q. And how did you get them on there?
- 19 A. I used an *iTunes* computer to create the playlists
- 20 and put them on the device.
- 21 Q. And what kind of connection did you use?
- 22 A. I used a USB connection.
- 23 Q. All right. Did you observe what happened when you
- 24 plugged the USB plug into the player?
- 25 A. Yes, I did.

Q. What happened?

MR. STEPHENS: Objection, your Honor. Again he's talking about a product that's not accused.

THE COURT: All right. And by that you mean the computer loaded with the iTunes program?

MR. STEPHENS: That's correct.

THE COURT: Okay. And for the same reasons,

8 I'll overrule that.

9 MR. STEPHENS: Thank you.

10 BY MR. HOLDREITH:

- 11 Q. And, Dr. Almeroth, my question is specific to the
- 12 i Pod.

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- 13 A. Yes, sir.
- 14 Q. What did you observe happening when you plugged
- 15 the iPod in?
- 16 A. When I plugged the cable into the bottom of the
- 17 iPod, it caused a synchronization with the *iTunes*
- 18 computer; and then this device received the playlists and
- 19 songs that were --
- 20 THE COURT: Wait, wait, wait. I want to hear
- 21 what you saw. I mean, unless you can tell me you saw the
- 22 synchronization inside the computer, that's --
- 23 THE WITNESS: I was --
- 24 THE COURT: Let's be very clear what you saw.
- THE WITNESS: Okay.

BY MR. HOLDREITH:

- Q. Dr. Almeroth, let's stick to what you could observe externally. We'll get to what you know about what happens inside later.
- A. Okay. What I saw was on the *iTunes* computer that application start up and cause a synchronization to take place.
- 8 Q. And what do you mean by "synchronization"?
- A. The synchronization process is the process of downloading songs and playlists onto the iPod.
- 11 Q. Were those two playlists, PA Playlist 1 and PA
- 12 Playlist 2, were they on there before you plugged it in?
- 13 A. No, they were not.
- 14 Q. And after you plugged it in, did they show up?
- 15 A. Yes, they did.
- 16 Q. Okay. Why don't you go ahead and demonstrate how
- 17 to play a playlist using the continuous play mode.
- 18 A. Certainly. One of the things that I can do is
- 19 just press the "play" button and it will start playing
- 20 the first song of the playlist.
- 21 Q. How do you know this is the first song in the
- 22 playlist?
- 23 A. Because up here in the corner (indicating) it says
- 24 "1 of 4." That's the first song of the four on the
- 25 playlist.

- 1 Q. All right. And we can't quite hear it here, but
- 2 that's okay. Can you hear it coming out of the speakers
- 3 there?
- 4 A. Not yet. I haven't turned up the volume.
- 5 Q. Okay. Now, can you demonstrate for us -- looks
- 6 like this song is some four or five minutes long?
- 7 A. Yes.
- 8 Q. Is there a way to speed up the process of seeing
- 9 what happens when this song ends?
- 10 A. Yes. I can -- now there are about ten seconds
- 11 left in the song; and what we'll see is when the song
- 12 ends, it will go to the next song.
- 13 Q. What just happened?
- 14 A. That song ended. Song 1 of 4 ended, and then Song
- 15 2 of 4 started.
- 16 Q. And did you touch any buttons or do anything to
- 17 make Song 2 start playing after Song 1 ended?
- 18 A. I did not.
- 19 Q. All right. Can you now -- have you observed
- 20| whether the iPod will continue to do that through the
- 21 playlist as each song ends?
- 22 A. Yes, I have. This song is a long song. It's
- 23 eight minutes and -- almost nine minutes. I don't think
- 24 we want to wait that long. But if we go to the end of
- 25 this song, it would automatically go to 3 of 4 on this

- 1 playlist.
- 2 Q. All right. Now, Dr. Almeroth, could you
- demonstrate what happens when you push the "skip forward"
- 4 button, please?
- 5 A. Certainly. This is the button on the right
- 6 (indicating), skip forward. Now we just went to Song 3
- 7 of 4.
- 8 Q. And how can you tell that that's 3 of 4?
- 9 A. In the upper left-hand corner, the number changed
- 10 from "2 of 4" to now it says "3 of 4."
- 11| Q. All right. And can you demonstrate one more
- 12 time -- so we know what to expect this time -- what
- 13 happens when you press the "skip" button forward?
- 14 A. Now it's gone to the last song, a Frank Sinatra
- 15 song; and it shows "4 of 4." And I have the volume on
- 16| the speaker set so that I think a couple people can hear
- 17| but not so that it overwhelms your questions.
- 18 Q. All right. Now, we haven't gotten to this yet;
- 19 but will we be talking about the "skip backward" button
- 20 later?
- 21 A. Yes. we will.
- 22 Q. Can you demonstrate for us what happens when you
- 23 press the "skip backward" button? And first tell us
- 24 what's going to happen, and then show us.
- 25 A. Certainly. If I press the "skip back" button now,

- it will go back to the beginning of the song. It's 35 seconds into the song. So, if I press "skip back," it will just go back to the beginning of the song
- How can you tell it went back to the beginning of Q. 6 the song?
- A couple of ways. It's still Song 4 of 4. still the Frank Sinatra song. And this number here (indicating) that indicates how much time has elapsed 10 went from about 35 seconds back to zero. And I can 11 demonstrate it again. It's now on about 18 seconds. 12 We'll turn it up a little bit. (Demonstrating).
- 13 So, now we're about 25 seconds in. If I press 14 the "back" button, the same song back to the beginning.
- 15 Is zero the beginning of the song? Q.
- 16 Α. Yes.

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(demonstrating).

- 17 All right. Now, Dr. Almeroth, does something Q. 18 different happen when you hit that same "back" button if you do it at a different time interval? 19
- Α. Yes. Less than three seconds into the song, if I press the "back" button, it will go from the fourth song 22 to the third song. It uses a three-second threshold. Ιf 23 more than three seconds has elapsed, it goes to the beginning of the song. If less than three seconds has elapsed, it goes to the beginning of the previous song in

- the playlist.
- 2 Q. Can you show us that?
- 3 A. Sure.
- 4 Q. Tell us what you're going to do and then show us.
- 5 A. I'm going to hit the "back" button twice. Once to
- 6 send it back to the beginning of the song. It will be
- 7 less than three seconds, and then I'll hit the "back"
- 8 button again. So, back once, back twice (demonstrating).
- 9 And now we're to the third song on the list, Song 3 of 4;
- 10 and this is Bruce Springsteen.
- 11 Q. Okay. Finally -- we haven't talked about this yet
- 12 either, but we'll get to it. Is there a way that you can
- 13 look at this playlist, pick any song you want, and go to
- 14 that song?
- 15 A. Yes, sir.
- 16 Q. Can you show that, please?
- 17 A. If we go back to the menu and we can select "PA
- 18 Playlist 1," it shows that there are four songs on this
- 19 playlist and Number 3 is the one that's currently
- 20 playing. It has a little speaker icon with sound coming
- 21 out of it (indicating).
- 22 And we can use the wheel to move down on any
- 23 one of these songs, and we can select it. So, for
- 24 example, I'll select the song "Pinch Me" and then press
- 25 the "select" button, the circle inside the larger circle;

- and it will go and play the first song on the list.
- Q. Now, Dr. Almeroth, now that you've selected the first song, could you also have gone to the second song
- 4 or the third song or any one you wanted to?
- 5 A. Yes, that's correct.
- Q. Now that we're on the first song, what happens if you push the "back" button two songs when you're on the very first song in the playlist?
- 9 A. If I press the "back" button twice, because I'm in 10 repeat mode -- and there's a little icon that represents 11 that I'm in repeat mode -- I'll go back to the beginning 12 of the fourth song. I'll go from the first song back to 13 the fourth song. (Demonstrating).
- So, this is back to the first Sinatra song.
- 15 Q. So, when you skip backwards from the beginning in 16 repeat mode, where do you go?
- 17 A. To the last song on the playlist.
- 18 Q. Okay. And how about if you skip forwards from the 19 last song? So, we're at Song 4 of 4. What's going to
- 20 happen if you skip forward to the next song now?
- 21 A. If I press the "skip" button now, you wrap back
- 22 around and go to the first song on the playlist.
- 23 (Demonstrating). And that's the "Pinch Me" song again,
- 24 and it says Song "1 of 4."
- 25 Q. Is there anything else you wanted to demonstrate

- right now with that?
- 2 A. Those are the functions that I wanted to
- 3 demonstrate.
- 4 Q. Okay. Dr. Almeroth, did you also perform that
- 5 same kind of analysis with respect to other versions of
- 6 the iPod that are laid out there in front of you?
- 7 A. Yes, I did.
- 8 Q. And that included members of the mini family?
- 9 A. Yes.
- 10 Q. Did it include members of the nano family?
- 11 A. It did as well.
- 12 Q. Do they behave in a similar way?
- 13 A. Yes, they do.
- 14 Q. Dr. Almeroth, I wanted to ask you just quickly
- 15 about that repeat. Can you turn the repeat mode off if
- 16 you want to so it doesn't loop around?
- 17 A. Yes, I can.
- 18 Q. What happens if you press -- if you're at the end
- 19 of the playlist, Song 4 of 4, and you're not on repeat
- 20 mode and you skip -- try to skip forward?
- 21 A. The playlist will stop. And I can demonstrate
- 22 that if you'd like.
- 23 Q. Okay.
- 24 A. (Demonstrating). We'll go back to the menu, to
- 25 the menu, to the menu. And now we'll go down to

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"settings," select on "settings," go down to "repeat," currently set to "all." And I will change it to "off."

Go back to the menu, go back up to playlist, press "select." Go to "PA Playlist 1" and press "select." And then we'll go ahead and play the first song; and then we'll skip to the second, skip to the third, skip to the fourth.

Okay. So, now we're on the last song of the And if we press the "skip" button again, we'll go back to the top level menu. That playlist will have completed and playout will stop.

- 12 All right. Now, Dr. Almeroth, I was just curious. Q.
- 13 You had a second playlist on there, PA 2?
- 14 Yes. Α.

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- 15 Q. What's that?
- It's a second playlist. What's interesting about Α. this playlist, just to show you, now you have four songs but the first three songs are the same and the last one is different. It shows you the kind of flexibility where you can have similar playlists even though this iPod only has five songs stored on it. You have the first three 22 that are common to the two playlists and then a fourth 23 one that's the fourth song on the first playlist and then the fifth song is the fourth song on the second playlist, if you can follow that.

- 1 Q. All right. But the point is that you can take the 2 same five songs and arrange them different ways with
- 4 A. Yes. That's correct.

different playlists?

- Q. All right. Why don't you go ahead and put that demonstration away, and we'll continue.
- All right. Dr. Almeroth, in addition to analyzing the classic 3 the way you just demonstrated, element by element for claim 1 of the '076 patent, did you also do that same kind of analysis, line by line and document by document, for the other 13 iPods -- or other 12 12, I should say?
- 13 A. Yes, the other 12. I did.
- 14 Q. And did you look at source code from the other 12
- 16 A. Yes, I did.
- 17 Q. Did you do that same kind of analysis you just
- 18 showed us for those other 12 iPods with respect to the
- 19 source code?

iPods?

- 20 A. I did.
- 21 Q. I show you again Plaintiff's Exhibit 1058 and --
- 22 which you showed on Friday. Just remind us. What does
- 23 this chart show?
- 24 A. This chart shows eight groupings of devices, and
- 25 they range from classic 3 to nano 5. Groups 2 and 6 have

- multiple members to the group. And then below each of the groupings there is a version number, and that represents the latest version of the source code that runs on those devices.
- 5 Q. All right. Which of these groups -- just to 6 orient us -- is the one that we just went through?
- 7 A. That was Group 1. That was the classic 3.
- 8 Q. All right. Now, for all of the other seven
 9 groups, 2 through 8, did you have a similar set of
 10 documents that you were able to reference that described
 11 the technical features of the members of those groups?
- 12 A. Yes, I did.
- 13 Q. And referring back to Plaintiff's Exhibit 748A,
- 14 does that chart list the set of documents for each group?
- 15 A. Yes, it does.
- 16 Q. I'm showing page 4 now. At the top of page 4,
- 17 there is a title. Can you explain that title, please?
- 18 And I'll blow it up.
- A. This title is for the second group. This is the group with the three devices. It had the classic 4 and
- 21 then the mini Generations 1 and 2.
- Now, in that grouping, the mini 2 was selected as the representative device. I could have performed an analysis on the mini Generation 2 and the conclusions that I drew about that device with regard to infringement

- would also apply to the classic Generation 4 and the mini
- 2 Generation 1.
- 3 Q. And who decided that it would be that way?
- 4 A. The groupings were done by Apple.
- 5 Q. And who decided that the mini 2 was the
- 6 representative device?
- 7 A. That was Apple.
- 8 Q. Okay. I see here under the documents you've
- 9 listed for that Group 2, there is a listing of classic
- 10 Generation 4, which looks like it's a member of the
- 11 group. Why is that?
- 12 A. I did a separate analysis just to make sure that I
- 13 analyzed all of the devices separately. So, even though
- 14 I had the representative Group 2, I also had documents
- 15 with respect to the classic 4; and then on the next page
- 16 is also the mini 1. So, I made sure to look at all of
- 17 the documents just to make sure that they were consistent
- 18 and that my opinions with regard to infringement applied
- 19 to all of the members of the group.
- 20| Q. Okay. So, which group or groups does page 4 of
- 21 your index, Exhibit 748A for plaintiffs -- which group
- 22 does that relate to?
- 23 A. It relates to Group 2.
- 24 Q. All of this page?
- 25 A. Yes, sir. And then all of the next page as well.

- 1 Q. And when you said "all of the next page as well,"
- 2 is that mini 1 as another member of that group?
- 3 A. Yes, it is.
- 4 Q. Okay. And then for page 6, classic Generation 5,
- 5 is that one of the groups that you studied?
- 6 A. It is.
- 7 Q. And does page 6 of Plaintiff's Exhibit 748A list
- 8 the documents that describe technical features of the
- 9 classic Generation 5?
- 10 A. Yes, it does.
- 11| Q. Okay. Let's remember. It's classic Generation 5.
- 12 Which group is that?
- 13 A. That's Group 3.
- 14 Q. Now, just to make a record -- and let's try to do
- 15 this quickly -- returning to page 7 of Plaintiff's
- 16| Exhibit 748A, is this a listing of documents you relied
- 17 on that provide a technical description for the nano
- 18 Generation 1?
- 19 A. Yes.
- 20 Q. And is that Group 4?
- 21 A. 4, yes, sir.
- 22 Q. Similarly, page 8, is that -- of 748A for
- 23 plaintiffs, does that provide a list of technical
- 24 documents that describe the nano Generation 2 that you
- 25 relied on?

- A. Yes.
- 2 Q. And nano Generation 2 is group --
- 3 A. 5.
- 4 Q. Okay. Pages 9 and 10 of Plaintiff's Exhibit 748A
- 5 relate to which group?
- 6 A. That is Group 6; and it includes the two items,
- 7 the nano Generation 3 and it also includes the classic
- 8 Generation 6.
- 9 Q. Page 11 of Exhibit 748A, which group is this?
- 10 A. This is nano Generation 4, and that's the one item
- 11 in the seventh group.
- 12 Q. Finally, page 12 of Exhibit 748A for plaintiffs,
- 13 what's shown here?
- 14 A. This is the nano Generation 5, and this is the
- 15 eighth group.
- 16 Q. All right. Now, Dr. Almeroth, when you explained
- 17 the documents you relied on for the classic Generation 3
- 18 here at page 3 of Plaintiff's Exhibit 748A, did you do
- 19 anything to create a summary of the portions of those
- 20 documents that you relied on to find the elements of the
- 21 '076 patent?
- 22 A. Yes, I did.
- 23 Q. And how did you go about doing that?
- 24 A. What I looked at was -- for each of the groups,
- 25 what I tried to do was understand where there were common

- 1 features that related to the limitations of, for example,
- 2 the '076 patent and I prepared a chart where for the
- 3 columns I would identify each of the groups and then for
- 4 rows I would identify features and characteristics of the
- 5 devices as they related to the limitations of the claims
- 6 of the '076 patent.
- 7 Q. Could you look now -- I'm not going to put it on
- 8 the screen; but could you look at Exhibit 771, please?
- 9 That's in the little skinny extra book where we looked at
- 10 771A earlier.
- 11 A. Yes, sir.
- 12 Q. Looking at 771A, is that a document that you had
- 13 prepared?
- 14 A. Yes, sir, it is.
- 15 Q. And does 771 for plaintiffs show quotations from
- 16 the technical documents that you reviewed that are listed
- 17 on Plaintiff's Exhibit 748A?
- 18 A. It does.
- 19 Q. Is there anything in that document other than
- 20 quotations from the technical documents you relied on and
- 21 quotations from the patent?
- 22 A. It does not.
- 23 Q. And is Exhibit 771 a summary of the technical
- 24 documents you reviewed along with Apple's interrogatory
- 25 answers and the information in those documents that you

found helpful to determining whether the claim limitations of the '076 patent were met?

A. Yes. That's what this document contains.

MR. HOLDREITH: Your Honor, I offer Plaintiff's Exhibit 771 as a summary, under Rule 1006, of voluminous documents.

MR. STEPHENS: Objection, your Honor.

THE COURT: Is it 771 or 771A?

MR. HOLDREITH: Your Honor, I had offered 771A previously, which was source code. This is 771, which is a summary of the technical documents that we went through at the beginning of the analysis.

THE COURT: Okay. Ladies and gentlemen, it is 5:00, which comes at a handy time. So, we're going to break for the evening. We'll start again tomorrow morning on the schedule we've been on before. We'll start at 8:30 and your lunch will be brought in at noon as before and we'll break sometime probably right at 5:00 or shortly thereafter.

Again, please remember my instructions. Don't discuss the case with anybody. Definitely do not let anybody discuss the case with you in any way, shape, or form. If somebody should try to do that -- and, of course, I'm not talking about, as I said before, someone saying, "What were you doing today?" But if someone is

Sure.

summary of evidence under Rule 1006. It's really their

This is not a proper

MR. STEPHENS:

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infringement contentions. It's essentially the same thing as what was attached to Dr. Almeroth's report with the deposition portions taken out.

If this is a summary of evidence, your Honor, 1006 has no real meaning because you can put any evidence you want into a document and then move it into evidence under 1006. This is a compilation of a lot of things that Dr. Almeroth did not testify about and some things that he did put together into a claim chart to support their allegations of infringement. It's just their infringement contentions.

THE COURT: Okay. Point to me the items about which he did not talk about, about which he did not speak.

MR. STEPHENS: So, for example -- well, your Honor, it's kind of hard with 130 pages of material here to go through; but I believe --

THE COURT: Well, let me -- counsel -- and this is to both sides. The rules on summaries are somewhat restrictive. Now, the Fifth Circuit cases give me some leeway. And, for example, many courts will allow an attorney to go through with a witness, say, a timeline, on April 1 you did thus-and-so and April 2 you did thus-and-so, and I've even seen it where the next witness comes in and more points are put in and at the

end you have a timeline and that can be allowed, without reversible error, in as an exhibit basically constructed almost on the spot as a timeline.

Now, technically it's not a summary of underlying documents; and there are cases, especially financial document kinds of cases, where summaries will be put together. I'm concerned -- well, in patent cases I think some leeway has to be given to attorneys in an attempt to provide something to juries because -- especially a case like this. I mean, this isn't a nuts and bolts or a little piece on a motorcycle case or a tractor. This is much more complicated.

So, on one hand I am inclined to allow some leeway in allowing development of the evidence. And you take a look at the rules of evidence and how they're to be interpreted. But on the other hand, to put into a summary things that were not discussed --

MR. STEPHENS: And I can give you specific -THE COURT: -- is not appropriate and then
also things that are not -- for example, the pictures
of -- I mean, if, for example, the page -- on page 1 -in other words, it has a page that shows the iPod and it
says, "iPod Classic Third Generation User Guide, page" -and it gives a page number. If that is, in fact, a page
of the user guide, that would seem to me to be the kind

of thing you might be able to include in a summary.

But then if we take a look at pages 2 and 3, 2 says it's from the specification; but I can't tell if that's a picture with something -- or if that's what's actually on that specification page.

And then on page 3 of the exhibit, those seem to just be a couple of pictures.

So, those aren't really summaries of underlying documents. That's just a couple of photographs which you could have in -- you don't really need that in a summary.

So, that, in effect, in my mind covers some of the problems -- you know, some would appear to be within the kind of leeway I would see possible in this kind of case.

Now, pages that simply weren't discussed, that's a little much because -- it's what I've discussed before. To just simply dump on the jury, let's say, a book of source code wouldn't do them much good.

So, what I'd like is for counsel to discuss and let's see if we can get together on or if you can get together on what pages flat weren't discussed.

Do you have an example?

MR. STEPHENS: I have several examples, your Honor.

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843
 1
              THE COURT:
                          All right.
                                      Give me the first one.
2
              MR. STEPHENS:
                             Okay.
3
              THE COURT:
                          Page --
              MR. STEPHENS: Well, there's one on page 4.
4
5
              THE COURT:
                          Okay. Page 4.
6
              MR. STEPHENS:
                             Element 1A, there is a
   discussion of audio file formats supported by the iPod.
   There is no discussion of that --
8
9
                          Okay. Well, this chart, is this a
              THE COURT:
10
   page from -- what is it?
11
              MR. STEPHENS: Your Honor, I was referring to
   the chart.
12
13
              MR. HOLDREITH: What it is, it's an excerpt
   from the third generation user guide that was -- the user
14
15
   guide was discussed by Dr. Almeroth. We haven't gotten
   to this page yet. We will. And this is just a quotation
16
17
   straight out of that user guide --
                          Okay. You say this is a
18
              THE COURT:
   quotation. Because you've shown some exhibits that look
19
   very similar to this. So, you're saying that what's in
20
   that large box to the right of 1A and to the right of the
21
22
   claim under the heading "infringement evidence" on page
23
   4, that's just simply a copy of what's in the user
24
   guide --
25
              MR. HOLDREITH:
                              Yes, sir.
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844 THE COURT: -- as referenced? 1 2 MR. HOLDREITH: Yes, sir. 3 THE COURT: Okay. All right. So, that's a user guide reference; and here we have that. 4 5 Now, Mr. Stephens, why shouldn't they Okav. 6 be allowed to use -- are you saying that whole page just simply wasn't discussed? 8 MR. STEPHENS: Well, what I'm saying is that 9 they've put in lots of pieces of evidence that there has 10 been no discussion about. That's one example. 11 Another good example is on page 60 where they talk about whole software packages that are not 12 13 discussed --14 THE COURT: Okav. Well, let me -- let's get 15 to it. MR. STEPHENS: 16 It's one thing for him to testify about a document and another thing to say that he 17 could just go through very large documents and pull out 18 19 pieces here and there and put them all into a 130-page 20 document. 21 One other point I'd like to make, too, your 22 Honor, these summaries fill an entire bankers box. I 23 don't know what a jury is going to do with that. We're talking about maybe a thousand pages. This is not a 24 25 summary that's going to be usable in any meaningful way

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   by the jury. This is about protecting the record by
   moving into evidence things there has been no testimony
3
   about.
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              MR. HOLDREITH: Your Honor, if I may be heard,
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   I have a comment on that.
6
              THE COURT: Well, for example -- and maybe
   it's -- well, it would seem that any particular page of
   an Apple document could come in. I mean, if you've got,
   say, an Apple user manual for the iPod classic, I mean,
   what kind of objection could you have if a witness was to
10
11
   bring that in and introduce that as this is page 52 of
   the iPod manual?
12
13
              I suppose you could introduce some other pages
   if you thought that wasn't complete but --
14
              MR. STEPHENS:
15
                             Let me explain.
16
              THE COURT: -- could you argue that he could
17
   not get in, say, page 52 of the user manual?
18
              MR. STEPHENS:
                             That's not the issue.
19
              THE COURT:
                          Okay.
20
              MR. STEPHENS: He could certainly get in page
21
   52.
22
              THE COURT:
                          All right.
23
              MR. STEPHENS:
                            What he could not get in is his
24
   unexpressed opinion that that particular page maps onto
25
   element 1E, for example. I'm making that up, of course.
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And that's what this is for. It's not to get in that page of the document. Those are already in evidence, or they certainly could be admitted. We have no objection to that at all.

THE COURT: Okay. So, your concern, then, is really more the use of the summary when he hasn't stated the opinions on that.

MR. STEPHENS: Exactly. The use of things he has not testified as actually supporting his opinion to bolster his opinion through a very voluminous collection of documents, thousands of pages, that are clearly intended just for purposes of appeal, without any actual testimony in the courtroom on --

THE COURT: Well, let's be fair. Most of what you're going to put in is for purposes of appeal, too. I mean, in this kind of a case, learned counsel -- I mean, skilled counsel on both sides are keeping a close eye on that. I assume you've probably got appellate lawyers on both sides. So, let's not throw stones on the fact that it's for appeal.

The concern I have -- and this is directed to Personal Audio -- is almost exactly what Mr. Stephens is saying. The Fifth Circuit cases say I can allow in a summary and I think actually in a case like this summaries and even almost demonstratives could be

admissible with the proper instruction -- and this is what the cases also say -- that, you know, "Ladies and gentlemen, this is not in and of itself evidence. This is what the witness says are the pieces of evidence that apply. You, of course, will have to examine the underlying pieces of evidence and you must determine" -- I mean, it's -- the instruction is along that line as indicated by the cases. And they also -- those cases teach that I need to be very careful about that.

Now, the ones that he went through on claim 1, I think that I would allow a chart with those pages that he actually talked about up against the claims as, in effect, a summary or demonstrative that they could have with them to aid them in their deliberations so that when they're saying, "All right. What was said about 1A," they would know what to look at and they could look at the piece of evidence that it refers to.

I can see counsel making an objection to that, but I think it's going to be hard enough for the jury to figure out what's going on. And, so, I think if the experts wanted to do that to kind of give them a map, here is the claim piece or here is the invalidity contention and here is the piece of evidence you should go look at, with the proper instruction from me, something like that might be -- I might consider doing

that.

that a lot of this he has not discussed in connection with anything. I mean, some of these are similar; and I guess the analysis that he went through on claim 1 with the classic is probably similar to what he's going to do with the same claims on the other versions of the iPod. But then what are you left with on appeal with -- you've got your evidence in the record and then you've got what I'm going to allow in with a summary and technically that's not going to be evidence. That's going to be kind of a road map to evidence that needs to be introduced.

MR. HOLDREITH: Yeah. So, your Honor, our intention is precisely to first help the jury get through this very large volume of evidence which I think is exactly what Rule 1006 is for; and we certainly are trying to find an efficient way for the court and for the jury to get through a huge volume of documents.

The documents which are quoted in this chart are all on the admitted list without objection.

THE COURT: Admissible.

MR. HOLDREITH: Admissible. Excuse me.

Admissible list without objection.

So, there is no objection to the underlying evidence. We're walking through it as much as we can and

we'll be going through more of it and Dr. Almeroth will be providing opinions. For example, he says, "Look, there is a user guide for each one of these 13 devices and it has similar information to what I've presented to you here." We do have a chart like this, just to tell the court where we're going. You know, there is a 772 and '73 and all of the way up to, I believe, '91 maybe. So, I think we have -- I think we have 13 of these things, 12 or 13.

THE COURT: Yeah, but you've asked me to admit this chart before you even -- I mean, you're already up to claim 14; and it hasn't even been discussed. All you've talked about so far is claim 1.

MR. HOLDREITH: Certainly happy to go through all of the claims first. We are going to do that. I won't do it quite this way. We'll point out differences and be a lot more efficient. And after I have the witness talk about the evidence for all those other claims, reoffer this exhibit.

But it is simply excerpts of admissible evidence.

THE COURT: Okay. Then when you have gone through the evidence that you say is -- I'm going to sustain the objection for now. When you have gone through all of that evidence that you say is in there, go

ahead and offer it again. I'll allow Mr. Stephens to And what I'm going to want is very -- I mean, if it's a page from an Apple manual, user guide, whatever that's on the admissible list and the witness has talked about it, then that's one thing. If it's things that aren't there at all, that's another. And I'm going to -and I've got in my mind what the instruction would be. I've used it in the past, and I'll just have to -- but it's basically going to be an instruction to the jury that they're going to look at this basically for purposes of a -- basically a summary but not as evidence and telling them that they need to look at the underlying evidence and documents. This is just barely where it --I mean, that's a -- like I say, that kind of instruction I'm going to draft out so I can read it very clearly to them.

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I will consider that at that time if you've gone through all of this, but I think Mr. Stephens is correct at this point. To just let this in and all these things come in -- I think you would be cutting your own throat actually because the higher court would look at that and say, "No, that's just too much. The trial court gets some discretion, not that much." Okay?

And then, of course, when they get to that point, you'll be in a position then to see what

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they've -- how they have set this up. And you may be considering this for your expert also.

It is confusing, and we all know that. have a claim. You have a bunch of elements. How do you put it to a jury so that when they're looking at, say, claim element 1A, what are the pieces of evidence you want them to look at and what are the pieces of evidence you want them to look at, either for infringement or invalidity.

I can see this as a legitimate way under the rules to be done, as long as the jury is clearly Now, I don't think these charts or summaries instructed. should have somebody else's interpretation of what the If this is an actual copy of a page or half manual savs. a page from the manual, that's one thing. But to have an expert say, "Well, on page" -- or "In such-and-such a manual, they admitted" -- that's not proper either.

And then just to have -- I'm not sure what the benefit is of having the photographs, unless it was a photograph contained in the manual.

MR. HOLDREITH: There are three kinds of photographs in there. I can explain if the court would like.

THE COURT: Okay. Well, I'm just telling you. 25 Just a flat photograph of like this one on page 3 on the

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top, that looks like something that probably you or the doctor took on a table.
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MR. HOLDREITH: It's one of the physical exhibits --

THE COURT: Sure.

MR. HOLDREITH: -- that he's talked about.

THE COURT: Well, that doesn't need to be in the summary. I mean, you can argue and hold those up to the jury and so forth.

Now, the diagram that was in somebody's manual, that's a little different. If that was actually a page out of the manual, fine.

MR. HOLDREITH: It is.

THE COURT: Okay. But I think you need to go through this with some care, just -- well, like here there is a -- it looks like pages 3 and 4 are almost exactly -- they are the same. It's kind of duplicative when they're just photographs.

So, I'm going to sustain the objection at this time. I'm not saying at the end you won't be able to get in some kind of a demonstrative that the jury will be able to use as an aid to looking at the evidence, but they're going to be instructed that that in and of itself -- his summary or his opinion is not the evidence.

They've got to remember what he testified and then look

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   at the piece of evidence.
2
              MR. HOLDREITH:
                              I think an instruction is
3
   entirely appropriate, your Honor.
4
              MR. STEPHENS: Thank you, your Honor.
5
              THE COURT:
                          Okay. All right. Anything else
   that needs to be taken up outside the presence of the
6
   jury at this time?
8
              MR. CORDELL: Your Honor, I do have a
   housekeeping issue.
10
              THE COURT:
                         All right.
11
              MR. CORDELL: We have a witness that we were
   going to call a little later and we just hoped we were a
12
13
   little further along by this time and he's working for a
   different company now and he's got commitments on
14
15
   Wednesday morning back in California. We were hoping to
16
   take him out of order tomorrow at some point.
                                                   And we'll
17
   leave to the plaintiff when they would like to hear from
18
   him.
19
              THE COURT: Who is it?
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              MR. CORDELL: It's Tony Fadell. It's someone
21
   they had on their list and they want to talk to as well.
22
              THE COURT:
                          About how long do you think you're
23
   going to have him on?
24
              MR. CORDELL: I think it's maybe 45 minutes or
25
        Is that --
   SO.
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854 MR. STEPHENS: 1 Maybe an hour. 2 MR. CORDELL: Maybe an hour, 45 minutes to an 3 hour. 4 THE COURT: All right. And let me hear from Personal Audio. 5 6 MR. SCHUTZ: Your Honor, Mr. Fadell is one of the witnesses whose documents were produced late. We had an additional deposition that the court ordered on him, just for the context of who Mr. Fadell is. 10 He's under contract to Apple at \$10,000 a 11 I understand he's got some scheduling thing. We would object to him being inserted into our case. 12 13 not sure what steps they've taken to see if he can stay 14 over. 15 If he is inserted into our case, we'd like to call him then adverse so that I can cross-examine him 16 17 first. I think it's unfair for them just to start their case with their first witness on direct in the middle of 18 19 our case. THE COURT: And you had him on your witness 20 list anyway? 21 22 MR. SCHUTZ: I think -- I'm not sure we had 23 him on our witness list.

come to, your Honor, was that any witnesses that we

I mean, one of the agreements we had

24

25

designated and they counter-designate -- well, the agreement we reached was we would not be deemed to have rested until these witnesses that we were going to call adverse in our case testified in their case. And, so, the plan would have been Mr. Fadell would testify in their case; we would be able to cross-examine him with no limitations on scope as if we had called him adverse in our case; but that was going to happen in their case.

THE COURT: Slow down a minute. Let me look at the pretrial order here.

MR. SCHUTZ: Your Honor, the --

THE COURT: Okay. Originally -- let me ask

Mr. Cordell. Originally Apple agreed that they wouldn't

pull him out of order but you would make some

arrangements on the JMOL and so forth. If you're wanting

him out of order, why shouldn't they just go ahead and

question him first?

MR. CORDELL: The way it unfolded, your Honor, is that we put our list in; they put theirs in. I don't recall -- and I can't verify -- whether or not they originally meant to call Mr. Fadell. But the court's order, I believe, made clear that we were to call each witness once and only once.

THE COURT: Right.

MR. CORDELL: And that was the genesis of our

agreement that they could then just call them in our case.

The alternative that Mr. Schutz was facing at the time was to actually put them on by deposition. He was going to play their deposition testimony in his case; and then we would have them live later in our case, I believe is the way -- the situation --

MR. SCHUTZ: That's not --

THE COURT: Well, wait, wait, wait. All I'm asking is that you're wanting him out of order. You had agreed that actually you'd take him and they wouldn't call him or they wouldn't bring him by either deposition or whatever. What is the problem, if you want to bring him in during the middle of their case, that they just go ahead and bring him as an adverse witness and you put on whatever you want to put on with him?

MR. CORDELL: Obviously, your Honor, we'd like to present him to the jury on direct. I mean, that's -- we feel like the jury ought to meet the witness and understand what he's all about before we get into the issues that I'm sure Mr. Schutz wants to explore with him.

He is under a consulting agreement with Apple, and I'm sure Mr. Schutz is going to play that out in front of the jury. I'd like them to get to know him a

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   little bit before Mr. Schutz begins to barb at him a
2
   little bit.
3
              THE COURT:
                          Well, I think under these
   circumstances, because you're in the middle of his expert
4
5
   witness, if you want him to come -- it will have to be
6
   tomorrow, right?
7
                            It will be tomorrow, yes.
              MR. CORDELL:
8
              THE COURT: If you want him tomorrow, then --
9
   how long do you think you're going to have him, on
10
   Personal Audio's side?
11
              MR. SCHUTZ: On adverse cross?
12
              THE COURT: Yeah.
13
              MR. SCHUTZ: Half-hour to 45 minutes, I
14
   suspect.
15
              THE COURT:
                          Okay. So, we're talking about two
16
   hours.
17
              If you want to do that, since this is still
   Apple's [sic] case-in-chief, let them call him -- or let
18
19
   them talk to him first. It's always a danger to get
20
   somebody else's witness in the middle of your case, even
21
   if you wanted to call him. And then you can go ahead and
22
   let him have the last good word about what a great guy he
23
   is and you're telling them all the good stuff and then --
   hopefully from your point of view, hopefully that's the
24
25
   impression the jury will have of him as he walks out the
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door is he's a good guy rather than after Mr. Schutz has torn him to pieces. 3 MR. CORDELL: Well, let's hope, your Honor. Can we have an understanding, then, that he'll follow Dr. Almeroth? 6 THE COURT: Do you think he's going to be over tomorrow? 8 MR. HOLDREITH: Definitely. 9 MR. SCHUTZ: The plan is to have him over 10 What we would like to have is Dr. Almeroth to 11 finish and then have him come before we call Mr. Nawrocki. I think that will make more sense, 12 13 provided the time works out. 14 MR. CORDELL: I take the court's concern to

However, I mean, if Dr. Almeroth is still on the heart. stand at noon tomorrow, perhaps we should --

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Yeah. I would think that if THE COURT: Dr. Almeroth is not through by noon, then -- or at least if his direct is not through by noon -- say at 1:00 why don't we have this gentleman -- and Personal Audio can direct him or adverse direct him and then you can direct him or cross-direct him and then he'll be allowed to leave and then you can either finish up with Dr. Almeroth or then we'll go into cross on Dr. Almeroth.

> MR. CORDELL: That sounds fine, your Honor.

THE COURT:

Thank you.

you can get through all of the other claims and the -you've only gotten through one claim so far, right?

MR. SCHUTZ: That's right, your Honor, and
there are going to be some additional -- I'm speaking for
Mr. Holdreith; but in light of the issue on the 1006
summaries, I think we're going to be left with having
Dr. Almeroth at least touch upon the 150 or so exhibits
that support his opinion. I don't think we have any
choice but to at least at some level have him discuss
each of those exhibits because we had attempted to bypass
that by introducing the 1006 summaries as actual evidence
which --

But I just -- I'd be stunned if

THE COURT: Well, I think he's got to mention the other claims.

MR. SCHUTZ: And he's got to mention the other claims as well, yes. Yes. But we have a procedure for trying to short-circuit the analysis on the other claims because there's a lot of overlap in some of the other --

THE COURT: Well, and I've seen witnesses do that, too; but I'd be just very careful about a record that didn't relate evidence to claims and opinions to claims. I think your record -- in fact, if I was looking at an appeal from Apple's point of view, I might just let

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   them do that and see if --
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              MR. CORDELL: In retrospect, your Honor, I'm
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   wondering --
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              THE COURT: I don't know what they would do
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   honestlv.
              I mean, I really don't. I'm concerned about
6
   letting it go forward that way. I'm not --
7
              MR. SCHUTZ: Well, I didn't mean to
   short-circuit it, your Honor. What will happen is the
8
   witness will walk through the other claims and the
   elements and he will spend more time on touching each of
10
11
   these exhibits than he might otherwise have if --
              THE COURT: I mean, it's one thing to say, "Is
12
13
   this the page of the nano that's similar to the page that
   we talked about for that," "Do they say basically the
14
15
   same thing," and then move along.
16
              I mean, however you want to do it. But to
17
   just not mention it at all or to say, "Yeah, there's a
   bunch of similar stuff here. Let's move," I think that's
18
19
   a little touchy.
20
              MR. SCHUTZ: We understand that, your Honor.
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              THE COURT:
                          Okay.
22
              MR. SCHUTZ: We have a plan for dealing with
23
   that.
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              THE COURT:
                          Okay. So, at 1:00 we'll plan on
25
   this witness; and that actually may be a welcome break
```

for the jury, too.

MR. SCHUTZ: And then just one clarification on Mr. Fadell, your Honor, just so there is no misunderstanding. Of course I will be cross-examining him; and they will be directing him --

THE COURT: Uh-huh.

MR. SCHUTZ: -- under our normal procedure which I think should apply in this case. At 7:00 they need to disclose the documents they're going to use to examine him. I don't have to disclose what I'm going to use to cross-examine him, just as we've done with all of the other witnesses. I don't see why that procedure should be changed.

I get advanced notice of what they're going to do on direct in this case.

MR. CORDELL: Your Honor, couldn't that be the price that Mr. Schutz pays for going first? I mean, that --

THE COURT: Well, you're asking the guy to come in. I mean, it's presumably something that you want for your case.

MR. CORDELL: We do.

THE COURT: And you're establishing something either on invalidity or noninfringement or something along that line. So, I mean, he is your witness. Go

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   ahead and disclose what's going on, and then we'll just
   take it from there.
3
              MR. SCHUTZ:
                           Thank you, your Honor.
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              MR. CORDELL: We'll do it. Thank you, your
5
   Honor.
6
              THE COURT:
                          Okay. Anything else, then, from
   Personal Audio's point of view?
8
              MR. SCHUTZ:
                           Nothing else, your Honor.
                                                       Thank
9
   you.
10
              THE COURT: What about from Apple's point of
11
   view?
12
              MR. CORDELL: No, your Honor. Thank you.
13
              THE COURT: All right.
                                       In that case we are
   through for the evening. We're in recess. I'll see you
14
15
   tomorrow morning.
              (Proceedings adjourned, 5:35 p.m.)
16
   COURT REPORTER'S CERTIFICATION
17
18
              I HEREBY CERTIFY THAT ON THIS DATE, JUNE 27,
19
   2011, THE FOREGOING IS A CORRECT TRANSCRIPT FROM THE
   RECORD OF PROCEEDINGS.
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